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ANNUAL MEETING OF THE LAKE CARRIERS' ASSOCIATION.

Secretary C H. Keep, of the Lake Carriers' Association, has issued a call for the annual meeting of that organization. The subjects to be taken up and mentioned and the important topics are commented on. Mr. Keep says:

"The annual meeting of the Lake Carriers' Association will be held at the Cadillac Hotel, Detroit, on the 19th day of January, 1898, at 10 o'clock a. m. The annual reports for the year just closing will be presented, new officers and a new board of managers will be elected, the standing committees for the coming year will be appointed, the rate of annual dues for the year 1898 will be fixed, and other important business will be transacted. Reports will be received from the committees appointed to consider the loading and unloading charges of the various kinds of lake freight for the season of 1898, and the possibility of rendering and carrying business on the lakes more profitable in 1898 than it has been in 1897 by an agreement among vessel owners to establish a minimum charge for the transportation of coal, and possibly for the transportation of iron ore, will be thoroughly discussed.

"The Lake Carriers' Association cannot of itself take any action fixing freight rates since it has no power to bind the action of individual owners. Any action to be effective, must be individual action by vesselowners and managers, supported by a very large proportion of the vessel tonnage engaged in transporting the commodities in question. The annual meeting of the Lake Carriers' Association has become the one important gathering of vesselowners from all parts of the lakes. It seems, therefore, to be a proper place for the discussion of all questions on which there is a possibility that united action may be advantageous to owners' interests.

"The meeting will continue for at least two days. On the evening of the 19th, Mr. F. H. J. Porter, of Bethlehem, Pa., will deliver an illustrated lecture on 'Steel Forgings.' The business sessions of the association and its committees will be so arranged as to permit members to attend this lecture."

MARITIME LAW.

THE MEXICAN PRINCE.

STEINWENDER et al. v. THE MEXICAN PRINCE.

District Court, S. D., New York. August 25, 1897.

DAMAGE TO CARGO—ABSENCE OF SOUNDING PIPES—EQUIVALENT PROVISIONS—SEAWORTHINESS.—In a convertible steamer, built to carry fluid in bulk, as well as dry and perishable cargoes, a pipe line ran forward from the pump room, in the stern of the vessel, into and through the separated cargo compartments, with an offset from the main line in each, which could be opened and closed by a Kingston valve, operated by a spindle from the deck. Provision was made for testing these valves, and for ascertaining the presence of water in any compartment, and for removing it promptly by means of the pumps and pipe line. No deck sounding pipes were fitted. Damage having occurred by water entering a compartment from the pipe line, held, that the provisions made were adequate to prevent damage to dry cargo from water ballast in an adjoining tank, if properly managed, and that the vessel was not unseaworthy by reason of the absence of sounding pipes.

SAME—HARTER ACT—FAULT IN MANAGEMENT.—The steamer sailed with her No. 2 tank full of water for ballast, and with the neighboring compartments full of coffee in bags. During the voyage this water ballast was removed through the main pipe line, but, owing to the failure to have the valve in the offset leading into No. 3 tank closed, water entered there, damaging the coffee. Those in charge omitted to test the valve by means of the pumps, or to count the turns of the spindle which opened and closed the valve, before using the pipe line to discharge the ballast. These tests would have shown that the valve was not shut. Held, that the damage arose from neglect in the "management of the ship," within the third section of the Harter act, and that the steamer was not liable therefor. The Silvia, 64 Fed. 607, Id., 15 C. C. A. 362, 68 Fed. 230, and The Sandfield, 79 Fed. 371, followed and applied.

SAME—ALLEGED OBSTRUCTION OF VALVE ON SAILING—SEAWORTHINESS.—On the evidence, held, that it did not appear, as contended, that the valve was obstructed by pieces of wood at the outset of the voyage. Held, further, that such alleged obstruction, if it existed, would not have amounted to unseaworthiness, because accidental and temporary in character, and certain to be removed by application of the pumping tests prescribed by the shipowners' written instructions.

SAME—STOWAGE — PROXIMATE CAUSE OF DAMAGE—SEAWORTHINESS—FAULT IN MANAGEMENT.—Held, that the vessel was not unseaworthy in respect of her cargo by reason of the stowage of coffee in a compartment adjoining that in which water ballast was carried; that the pipe line, valve and pumping arrangement were adequate to have prevented the damage, if properly managed; and, that, therefore, the loss must be attributed to improper "management," and not to seaworthiness.

LIENS FOR SUPPLIES.

Unlike other countries, the person who furnishes the supplies and materials in a vessel's home port has no lien by the maritime law of the United States. In case the vessel belongs to the same state, our maritime law presumes that the supplies are furnished on the credit of the owner, and that a lien is unnecessary. This leaves the entire matter of supplies to and liens upon domestic vessels to be regulated by the diverse statutes of the several states. The evils of these regulations of state liens were pointed out by the the supreme court over twenty years ago and attention is again called to them in the annual report of the commissioner of navigation.

TRAFFIC THROUGH PORTAGE LAKE CANALS.

Major Clinton B. Sears, Corps of Engineers, U. S. Army, Duluth, Minn., in charge of the river and harbor improvements on Lake Superior has compiled commercial statistics showing the traffic each month of the Portage Lake ship canal for the season of 1897.

The estimated value of the traffic amounted to $34,044,269, although the total freight shows a decrease of 21,210 tons from the figures given for 1896. A recapitulation of these valuable statistics shows that the total number of vessels bound up numbered 1,009; net tonnage, 706,718; freight tons, 661,980; passengers, 17,495; number of vessels bound down, 57; net tonnage, 280,022; freight tons, 258,566, and number of passengers, 17,441.

A NEW TUG BOAT CONTRACT.

E. W. Heath, Benton Harbor, Mich., has contracted with Messrs. Lydon & Drews Co. for a tug boat to cost about $14,000. Her principal dimensions are 79 feet over all, 69 feet keel, 19 feet beam and 10½ feet molded depth. Engines, fore and aft compound with cylinders 14-30 by 20 to be built by the Montague Iron Works, Montague, Mich., who will also build the boiler to be 8 feet in diameter and 12 feet long.

A MILWAUKEE APPROPRIATION.

Senator Mitchell presented in the Senate the memorial of the Merchants' and Manufacturers' Association, of Milwaukee. It asks for an appropriation of $100,000 for deepening the Milwaukee and Menominee rivers to 21 feet. which is the present depth between the harbor piers. Senator Mitchell will urge the matter before the committee on commerce.

TONNAGE TAXES.

The tonnage tax reported for the year amounted to $731,770, a larger sum than has been collected by the government from this source since the change of the tonnage tax law in 1884, and an increase over the fiscal year ended June 30, 1896 of $187,000.

Vessels under the British flag paid $479,000, an increase of $120,000, over the previous year; American vessels paid $71,000, an increase of $4,000; German vessels paid $55,000, an increase of $12,000.

The collections at a 3-cent rate per ton on vessels from near by foreign ports amounted to $92,923, compared with $93,576 for the previous year. The increase in receipts was thus almost wholly due to steam vessels engaged in the trans-oceanic trade. There were 3,962 entries, at which these vessels paid $499,220, compared with 2,566 entries, at which $327,130 were paid during the previous year.

The receipts in New York increased from $189,000 for the fiscal year 1896 to $237,000; at Boston from $53,000 to $60,000; at Philadelphia from $46,000 to $62,000, and at New Orleans from $44,000 to $66,000.

LAKE COMMERCE AT ERIE, PA.

Erie, the only lake port in the state of Pennsylvania, shows the following lake receipts for 1897: Barley, 442,407 bu.; corn, 9,891,032 bu.; oats, 373,000 bu.; wheat, 5,088,701 bu.; rye, 793,476 bu.; flaxseed, 480,047 bu.; flour, 1,997,981 bbls.; lumber, 10,783,985 feet; lath in pieces, 2,860,800; shingles, 1,200,000; ties, 7,000; iron ore, 1,311,596 tons; pig iron, 10,077 tons; copper, 33,410 tons; lead, 13,829 tons; plaster, 1,331 tons; merchandise, 228,385 tons. Shipments—Anthracite coal, 515,801 tons; bituminous, 234,432 tons; merchandise, 123,677 tons; total shipments in tonnage, 873,910; receipts, 2,456,415 tons. Vessels arrived and departed during the season, 3,133, with a tonnage of 4,051,984. There was an increase of 100,000 tons of hard coal; 50,000 tons of soft coal and 50,000 of merchandise. The receipts in tonnage was an increase of three-quarters of a million tons; and there was an increase in the tonnage of vessels trading at this port of 400,000 tons.

ENTRIES AND CLEARANCES AT NEW YORK.

Custom house figures on the shipping of the port of New York for 1897 show that there were 4,614 arrivals of vessels from foreign ports, 7,095 from eastern domestic ports, and 3,789 from southern domestic ports. Of the foreign, 3,213 were British, of which 1,667 were steamships; 952 were American, of which 323 were steamships; 517 were German, of which 444 were steamships; 281 were Norwegian, of which 242 were steamships, 149 were Dutch, of which 138 were steamships, and 115 were French, of which 111 were steamships.

Of sailing vessels from foreign ports there were 94 entries of ships and 131 of barks, 40 of brigs and 381 of schooners flying the British flag; flying the American flag, 58 ships, 67 barks, 26 brigs and 478 schooners.

The coastwise trade confined under the navigation laws to American bottoms shows that of the 7,095 vessels from eastern ports 6,564 were schooners, while only 503 were steamers. The others were sailing craft of various rig. The southern trade shows a large proportion of steamers, there being 1,483, as compared with 2,246 schooners, the remaining 69 vessels being ships, barks and brigs.

OCEAN SURFACE AREAS.

The surface of the sea is estimated at 150,000,000 square miles, taking the whole surface of the globe at 197,000,000, and its great depth supposedly equals the height of the highest mountain, or four miles. The Pacific Ocean cover 78,000,000 square miles, the Atlantic, 25,000,000, the Mediterranean, 1,000,000.

NEWS AROUND THE LAKES.

BUFFALO.

Special Correspondence to The Marine Record.

I don't know what truth there is in the report, and have not yet been able to cover the ground properly, but it is said that Capt. Henry, of the Lehigh Valley Line, contemplates making a change in the near future.

It is said that underwriters lost money on lake risks this season. It is well known that bottom damage—and some of it pretty heavy too—had to be paid for, but there were few total losses and none that were very expensive.

With the departure of the U.S. revenue cutter McCullough this week for San Francisco, east about or via the Suez canal, it is worthy to note that her signal lights were furnished by the well-known Main street firm Russell & Watson. So does the Buffalo industries circumnavigate the earth and bound the globe.

A daily says this week that it ought to be possible to build a bridge to Grand Island that would not injuriously affect the Tonawandas or Niagara Falls. These little neighbors of the Greater Buffalo should not get unduly excited until there is an actual attempt to injure them. When the bridge is built, the interests of all the towns on the frontier ought to be consulted, especially in reference to its height.

A fire occurred this week on board of the Hand's line tug Grace Danforth, laying at the foot of Main street, and alongside the office of the company. It is estimated that to repair damage it will cost from two to three thousand dollars. As usual, the cause is a present mystery, and as a matter of course with all harbor tugs there was no insurance. This is too much of a loss for any tug company to stand without feeling put out about it, especially the way business has been of late.

At the annual meeting of the Buffalo Yacht Club, the following ticket was elected : Commodore, Frank R. Hower; vice-commodore, James S. Thompson; secretary, Edwin P. Sears; treasurer, Walter C. Cowles; measurer, Geo. S. Hubbell; fleet surgeon, Dr. E. P. Hussey; directors, George Clinton, Lewis G. Northrup, John W. Fisher, Henry H. Guenther; regatta committee, Edward P. Sharp, Henry L. Campbell, Adolph Rebadow.

The schooner Columbian was sold under the hammer by the United States marshal for $365. The Columbian was built at Green Bay in 1864, or about 34 years ago, and has a net measurement of 338.38 tons. Owing to her age and the additional fact that vessels of the old Welland canal type are no longer money makers, a determinate value cannot be set upon the craft, but it is possible that her new owner, John Lenahan may still make a few ducats out of her, but the chances are decidedly against him at the $365 price, which sums up at a dollar for every day in the year.

The Buffalo Grain Shovelers' Union held the first meeting of the year this week, at their rooms, No. 19 Main street. President M. F. Canny, called the meeting to order. After he had reviewed the work of the union for the last year in a brief speech, the financial report was read by P. J. McGowan. This showed that the organization was in a strong financial condition, there being about $2,600 in the treasury. At the close of navigation there was $4,000 on hand, but the fund has been reduced through various benevolent expenses.

Resolutions were passed indorsing James Kennedy's handling of grain in 1897 as follows :

The Buffalo Grain Shovelers' Union, representing 1,800 men, who have been actively engaged in shoveling grain at this port for the last three seasons, at a general meeting, unanimously adopted the following resolutions :

Whereas, during the past two seasons there has been received at this port, and shoveled by us, a greater amount of grain by over 75,000,000 bushels than in any two previous seasons; and

Whereas, we point with pride and modestly claim that the work accomplished by us has never been equaled in efficiency. Although of stupendous magnitude, the work has been done in a careful, competent, businesslike manner, thereby giving the boats exceptional dispatch and service. They have thus been able to make an extra trip, and in many cases two, enabling them to make the season, so far as lay in our power, as profitable as possible; and

Whereas, the great work accomplished, the efficient and businesslike manner in which it has been done, is due in a great measure to the executive ability and untiring efforts of our employer, Mr. James Kennedy, in whom we have the greatest confidence to treat us all fairly, honestly and impartially ;

Resolved, that we tender him a vote of thanks for his uniform kindness, his fair and just treatment, and for his untiring and successful efforts in our behalf; and be it further

Resolved, that we respectfully petition the Lake Carriers' Association, in recognition of the faithful, painstaking and competent manner in which the work has been performed for the past three seasons, to renew their contract with Mr. James Kennedy, and we will promise a hearty co-operation to equal, or, if possible, surpass the service and work of any previous season; and be it further

Resolved, that a copy of these resolutions be spread upon the minutes of this union, and a copy sent to the Lake Carriers' Association, Mr. James Kennedy and the daily papers.

Speeches were made by L. J. Maher, P. J. McMahon and others in reference to the possible reduction of wages, and the sentiment of the meeting was that any such attempt would be strongly opposed. The next meeting is scheduled for January 26.

CHICAGO.

Special Correspondence to The Marine Record.

The Dunham Towing Co. towed the steamer Venezeula to an elevator to load grain for winter storage.

The annual meeting of the Dry Dock Convention will be held at Milwaukee on Tuesday January 18th.

The Independent Tug Line had the tug Edward Watkins and one of Fitzsimmons & Connell's scows in dock for calking and repairs.

Capt. James Davidson, of Bay City, and J. C. Gilchrist, Martin Mullen and Capt. John Mitchell, of Cleveland, were in Chicago Monday.

John Mohr & Son, boilermakers, are building five large marine boilers for steamers on the lakes. They are very busy and the outlook for the next six months is bright.

D. H. Robertson, familiarly known as little Danny, chief engineer of the steamer Jay Gould, on Sunday night became the happy father of a twin son and daughter.

The U. S. light-house tender Dahlia is at the Chicago Ship Building Co's. shipyard receiving new decks and cabins, new frames and breasthooks and a general rebuild, also large repairs to machinery.

At the Chicago Ship Building Co. the steamer Frontenac is in dock for some new frames and plates and a general overhauling, the barge Magna was in for some new bottom frames and plates.

At a meeting of the American Association of Masters and Pilots, Harbor 33, Chicago, held at their hall Thursday afternoon, Dec. 6th, Capt. W. J. Carter, Geo. Pardee and C. J. Hallahan were initiated new members of the association.

At Miller Bros.' shipyard the schooner Churchill is in dock for a new stem, some new chocks and covering-boards. The schooner Golden Age is receiving new decks, the steamer Niko will have repairs completed and go out of dock this week.

Considerable grain is being placed in vessels this week for winter storage and spring delivery at Buffalo, this to avoid elevator charges. The ruling rate is 2½ cents on wheat and it is likely that the majority of A1 tonnage will be under charter before the opening of navigation. At Milwaukee the corn rate is at 2¼ cents and a number of cargoes will be loaded there instead of having the vessels changing ports or seeking freights elsewhere.

At a meeting of the M. E. B. A. No. 4, Chicago, held at their hall Friday eve. January 7th, the following officers were appointed for the ensuing year: Louis Allison, president; E. G. Morris, 1st vice-pres.; Chas. Van Avery, 2d vice-pres.; D. H. Robertson, recording secretary; George Grubb, corresponding secretary; D. W. Wise, financial secretary; Geo. M. Furness, treasurer; W. C. Hawthorne, chaplain; John Connelly, conductor; Frank White, door keeper; Jacob Reitz, Wm. McKinley and Joseph Kelly, trustees. D, H. Robertson and Edw. Gould representatives to the M. E. B. A. convention at Washington.

MARINE CITY.

Special Correspondence to the Marine Record:

Capt. J. C. Young and W. G. Parker started from a point near Fairhaven, for Detroit, on an ice yacht. Much water and slush ice was encountered, but everything went well until the boat was abreast of Huron Point. Then the ice gave way and the men found themselves floundering in the water. They succeeded in climbing out upon solid ice after a hard struggle, but they found it impossible to draw the yacht out again until help was secured from one of the club houses near by. Then the boat was shipped back to Marine City.

The following vessels are in winter quarters at this port: Steamers Mohican, Santa Maria, Vigilant, George King, Kate Buttironi, M. Sicken, Abercorn, Tempest No. 1, Tempest No. 2, D. F. Rose, Reliable, G. W. Parker, Comfort, Aztec, Kittie M. Forbes, James Beard and Hiawatha. Schooners Maria Martin, George L. Colwell, John M. Hutchinson, Racine, E. T. Judd, N. C. West, J. R. Edwards, Yankee, Bahama, Levi Rawson, Melvina, E. J. McVea, Lyman Casey, Maize, John Breden, Boscobel, Buckeye State, Marine City, Troy, Keepsake, Homer, Uranus, Laney Sims, Fargo, Emma L. Coyne, Mingoe, W. H. Hawkins, Minnie E. Orton and St. Joseph.

Mr. Alex. Anderson returned Monday from Fremont, O., where he had gone to complete arrangements for the building of a lumber steamer for the Price Lumber Co. of that city. The new boat will be of wood, 130 ft. keel, 142 ft. over all, 30 ft. beam, and 9 ft. molded depth, with a capacity of 425,000 ft. of lumber on a mean draft of 8½ ft. of water. She will be equipped with all modern improvements, such as Beck steam steerer, "Providence" steam windlass and capstans, Tyzack's patent stockless anchors, deck hoists, and will have two pole spars, with booms, for handling cargo. The engines will be fore and aft compound, 16 and 32x36 of the Hodge pattern. Steam will be furnished by a marine boiler, 8½x13 ft., with a steam pressure of 130 lbs. Steel arches, 18x½ in.; steel keelsons, 20x⅝ in., and diagonal strapping, 4x½ in., will be used in her construction. The new steamer will have a water-tight bulkhead 16 feet abaft the stem, forming a water ballast compartment, an innovation in wooden ship building which is necessitated by the trade for which the steamer is built, transporting lumber from Upper Michigan ports to Fremont, thirty-six miles south of Sandusky, where the water is shoal. After discharging her cargo the forward compartment will be filled with water, thus raising the stern and enabling the boat to get down the river to Sandusky. She will class A1* and have a valuation of $28,000.

PORT HURON.

Special Correspondence to The Marine Record.

Capt. C. C. Belfour and family are spending the week with Capt. Powers, of this city.

The wrecks of the schooner M. R. Goff and the burned steamer S. E. Clark are fast going into kindling wood. B.

The work on the Tenth street bridge is being pushed as fast as possible. The work could go on much faster but there being no snow makes it very slow getting piles.

The U. S. life-saving station, which is being built about 7 miles from this city, is about completed. It will be an up-to-date station.

The Jenks Ship Building Co. is preparing plans for the construction of a new tug. Work will be commenced next week and the boat will be ready for launching by the opening of navigation.

The Grand Trunk Elevator Co. has decided to enlarge the Port Huron elevator at an expense of $60,000, increasing its capacity from 400,000 to 1,000,000 bushels. The company, with a capital of $100,000, has paid $61,000 dividends in ten years.

At Capt. James Davidson's shipyard, West Bay City, work is progressing rapidly on four wooden boats. A large amount of repair work is being done in fitting up the company's fleet for service in the spring. Both yards are running full time every day, and the force has lately been increased.

There was some little difficulty among the riveters at the Wheeler yards on Wednesday, and 120 men stopped work. It is expected that the trouble will soon be settled as it is more a question of a raise in pay for some classes of work, than a strike.

The tug J. P. Clark has just come out of the Wolverine dry dock where she received an entire recalking and repairs to her hull. Capt. Thomas Fish is about to charter her to tow four barges in the pulp wood trade from Georgian Bay to Sandusky and here.

The scow George Irving has been towed above the Fiber Works in Black river and sunk where she will no doubt be taken down the river with the spring freshet and may cause serious trouble with the boats lying at the Fiber Works laden with coal. This city has had one trial with an old wreck drifting down the river; about ten years ago the barge Dan Allen cost the city about $10,000 to repair bridges, etc.

DETROIT.

Special Correspondence to The Marine Record.

The annual meeting of the Dry Dock Association of the lakes will be held at Milwaukee next Tuesday.

The water has fallen about a foot below its usual or the normal level in the river here this week. Either the effect of ice or wind is said to account for it.

The steamer Pahlow, belonging to the Delta Lumber Co., traveled 26,000 miles last season and carried a total of 14,000,000 feet of lumber, besides towing a loaded barge for 19 trips.

Messrs. S. F. Hodge & Co., Riverside Iron Works, will build a fore and aft compound engine, cylinders 16 and 32 by 36 for a new wooden steamer to be built by Alex. Anderson, Marine City.

Capt. M. W. Humphrey and L. B. Colwell, of Detroit, have been prospecting on Sugar Island, in the "Soo" river, and recently struck a vein of silver that promises good developments. A box of the ore has been sent here.

At the shipyards of F. W. Wheeler & Co., West Bay City, there is now a force of several hundred men at work on new contracts. Three vessels for the Bessemer Steamship Co., Cleveland, are under way, two of which are on the stocks at the old yard and one at the new.

F. E. Kirby, of the Detroit Dry Dock Co., was at New York last week inspecting a process of submarine riveting by electrical power in one of the large eastern shipyards. He was one of the originators of a similar process that was tried in Wyandotte two years ago.

The Detroit Dry Dock Co. are figuring on another contract, which, if secured, will make their extensive shipyards at Wyandotte about the busiest spot for miles around here. In any case it is a pretty busy yard at this time with the contracts already on hand.

The marine element at this port are looking forward with much interest to the annual meeting of the Lake Carriers' Association, which is to take place here next Wednesday. This convention of vessel interests is becoming quite a feature in Detroit, and all parties vie with each other to make the stay of those from out of town as pleasant as possible while here.

The Shipmasters' Association mailed postal cards to members this week over the signature of Capt. A. J. McKay, president, bearing the following legend : "You are earnestly requested to attend a series of lectures on very important marine subjects, to be given under the auspices of the Shipmasters at their parlors, 12 Woodward Ave., Detroit, Mich., by prominent admiralty attorneys, civil engineers, shipbuilders and weather bureau officials, every Wednesday afternoon at 3 o'clock, sharp, commencing Jan. 12, 1898.

Lieut. J. E. Reimburg, of Chicago, is at Alpena holding an investigation of the charges preferred by the Thunder Bay Island life-saving crew against Capt. J. D. Persons, keeper of the station. From the views expressed by a marine man here, who is well acquainted with Capt. Persons, there is not a better keeper in the service, and he has done noble work in the past, he may however have been a little easy or lax with the crew, jealousy and gossip would account for the rest.

In May, 1896, Frank Rowe, a seventeen-year-old waiter on the steamer State of Michigan, fell into Detroit river and

was drowned. His mother, Sarah Rowe, brought suit against the Grummond estate, claiming $2,000 damages for the loss of the boy's services. Judge Frazer took the case from the jury and ordered a verdict for the defense on the ground that the accident happened in Canadian waters.

F. W. Wheeler & Co. have added a riveting machine, operated by compressed air, to their West Bay City plant, and if it fulfils the promises made for it a number will be ordered. The machine is operated by compressed air, and it is said to be capable of driving from 1,500 to 1,800 rivets per day, or about five times as many as a riveting gang, consisting of a heater, holder on and two riveters. The machine is operated by two men. Wheeler & Co. expect to have 1,500 men on their payroll within thirty days.

Senator McMillan's bill to provide a modern gunboat on the Great Lakes in place of the Michigan, referred to the department by the Senate committee on naval affairs, has been replied to by Secretary Long, who says: "The bureaus of construction and repair and steam engineering report concerning this matter that in their opinion it would be to the interest of the government to have the Michigan replaced by a vessel, which as a representative of the navy upon the Great Lakes, would have features of note other than antiquity, and further that we note that the limit of cost fixed within is that of the composite gunboats, Wheeling and Marietta. This limit was inadequate for these vessels and we believe that a gunboat upon the Great Lakes should differ from the Wheeling type in being unsheathed and of not less than 15 knots trial speed. This would involve greater cost and we would suggest $260,000 as an appropriate limit of cost. Senator McMillan will be authorized to report the bill to the Senate with a favorable recommendation in time to be incorporated with the annual naval appropriation bill, which is now being prepared in the House Naval Committee.

CLEVELAND.

Special Correspondence to The Marine Record.

Very mild weather has been experienced at this port during the week.

Mr. Louis Malm is the Norwegian consul at this port. His office is 458 Arcade building.

There is every indication that a large attendance of vessel owners will convene at the annual meeting of the Lake Carriers' Association to be held in Detroit next week.

It is the present intention of Capt. John Mitchell to spend the winter in California for a much needed rest.

Capt. Thos. Wilson, manager of the Wilson Transit line, will take his usual trip south, probably remaining several weeks in Florida.

The new steel barge built for Mr. James Corrigan at Chicago, has a gross registered tonnage of 3,745. This is one of the 6,000-ton carriers.

Ashtabula visitors to the Shipmasters' ball were: Tom Rennick, E. H. Burrill, Harry Perrigo, D. S. Cheney, Capt. Phil. Schied, B. F. Kerr and Daniel Bennett.

Capt. John V. Tuttle, surveyor for the Great Lakes Register, has been out of town all week on business for his classification society. He is expected back by the end of the week.

Among the visitors that attended the Shipmasters' ball on Wednesday night was Mr. A. J. Russell, of the firm of Russell & Watson, Buffalo, also Mr. A. B. Simpson with the firm of William Graham, Main street, Buffalo.

Work is being carried on at several lake ports towards the compilation of an illustrated history of the lakes. Mr. A. A. Pomeroy, has for over a year past been engaged in securing data, and is now working on the eastern part of this district.

Lieut. A. H. Scales, U.S.N., and Ensign Geo. C. Day, U.S.N., have reported for temporary duty at the local branch hydrographic office. They will probably assume charge, respectively, of the new branch offices to be opened at Sault Ste. Marie, Mich., and Duluth, Minn.

The many friends of Mr. Walter Miller, engineer surveyor for the Great Lakes Register, will be pleased to learn that he has almost entirely recovered from the effects of his recent somewhat severe illness.

At the annual meeting of the Ashtabula Tug Co., which was held Tuesday, C, E. Grover, D. R. Hanna, H. G. Dalton, M. A. Bradley and W. A. Collier were re-elected directors. The directors will meet in a few days and re-elect C. E. Grover president, D. R. Hanna vice-pres., and W. A. Collier, secretary and treasurer.

Mr. William A. Searles, consulting engineer, Hickox building, is secretary of the Civil Engineers' Club. The regular monthly meeting was held in the rooms of the club, Case Library, on Tuesday evening, when Mrs. M. S. Greenough addressed the club on the subject of "Modern Gas Engineering,"

The removal of the yards of the Cleveland Ship Building Co. to Lorain has boomed that vigorous little city away along to prosperity. Quite an army of men have found lucrative employment there, and although it is only a short ride from this port a large number of people have taken up their residence near the works. Lorain has now but to facilitate her industries and a thriving, bustling city is assured.

It is reported that the Lake Shore Co. is driving piles in the river bed about two hundred feet above the new swing bridge from the east bank out into the channel, ostensibly for the purpose of protecting the bridge abutments from damage by water or driftwood. The row of piles is said to be directly in front of the way prepared for the east channel through the bridge and the matter has been referred to the mayor who will probably see that a report is made to Col. Jared A. Smith, Corps of Engineers, U. S. A., who is in charge of the navigable waterways within this district.

A well-known Cleveland vesselowner and manager has had figures this week from several shipbuilding firms for a cargo steamer 428 feet over all, 50 feet beam, and 28 feet depth of hold. She is to be of the latest and best type, fitted and equipped as a modern cargo droger for the general carrying trade. It is now considered certain that the deal will be closed within the next few days as the entire arrangements are in the right hands, and the building work will be pushed for as early a delivery as possible.

During 1897 the iron mines of the Lake Superior region shipped nearly 12,500,000 tons of ore, (12,457,020 tons) although the beginning of the season found 3,000,000 tons of unsold ore piled on the docks along Lake Erie. In spite of this large hold-over and shipments exceeding all previous records by more than 2,000,000 tons, it is predicted that the opening of navigation this spring will find very little, if any, unsold ore on hand,

A special meeting of the Civil Engineers' Club was held December 28, 1897. The paper of the evening was on "Construction of Ships for Service on the Great Lakes," by Richard L. Newman, of the Globe Iron Works Co. The paper was illustrated by numerous drawings and charts, and treated of the methods by which modern ships are given greater strength in cross section without increasing the weight or depth, thus permitting the design of vessels of much greater length and tonnage than were thought possible a few years ago. The proper location of the machinery as affecting the strength of the hull was considered.

The half-mile plant of the Globe Iron Works Co., fronting on the old river bed, including the recently acquired dry dock property, has made that industry one of the most important on the chain of the lakes. There are but few shipyards so fully equipped as the Globe. Iron and steel vessels of modern construction can now be turned out ready for service, built, fitted and equipped from keel to truck by the various departments of this well-known shipbuilding firm and they can also be taken care of afterwards in the several dry docks under its management.

The annual reception and ball of the Cleveland lodge of the Shipmasters' Association, was held at Grays' Armory on Wednesday evening, and the largest crowd that ever attended a social event given by the masters was in attendance. All the leading firms of local vessel owners, and coal and ore shippers were represented, and a large number of visitors from Buffalo, Ashtabula, Lorain and other lake ports were present. The large hall was beautifully decorated with flags and banners and pennants of the different lodges of the association. There were 28 numbers on the program. Supper was served about midnight. The committee work was well cared for by nearly all the members of the local lodge as enumerated in this column three weeks ago.

The owner of a large steel steamer that has loaded a cargo of grain at Chicago, figures that nearly one-third of the vessels freight will be paid out for trimming and unloading charges. The committee appointed by the Lake Carriers' Association last year secured a small reduction in the cost of unloading grain at Buffalo, but vesselmen claim that the rate is still too high, aud that it is working against the lower lake ports. The rate for discharging all kinds of grain at Buffalo is $3.35 per 1,000 bushels, while at Georgian Bay ports, only $2.00 per 1,000 bushels is charged. The difference in the rate makes quite a difference to the owners of vessels. That the same rate is charged on all kinds of grain is wrong. The charges for unloading should be graded as the freight rate is, and the cost of handling oats should be less than corn and wheat. The indications are, that there will be quite a fight for the Buffalo contract this year, and a number of owners are in favor of giving the work to the lowest bidder.

The annual meeting of the Cleveland Yacht Club was held on Wednesday evening. The most important business was the election of officers and appointment of committees. Commodore George H. Worthington, vice-commodore Percy W. Rice and rear commodore W. R. Huntington were re-elected. A. R. Landreth, secretary-treasurer; measurer, A. D. Macbeth; assistant measurer, J. T. Radcliffe: surveyor, Henry Richter; fleet surgeon, Dr. E. E. Beeman. The following members were elected to the board of directors: Geo. H. Worthington, Horace Foote, J. E. Hannon, A. R. Landreth, jr., F. G. Overbeke, Joseph Kerbel. The members of the board whose terms have not yet expired are: P. W. Rice, W. R. Huntington, John Barth, J. R. Miller, G. W. Gardner, W. S. Otis, Richard Carleton, J. L. Gobeille, Burton D. Munhall. Committees were appointed as follows: House committee—F. G. Overbeke, Lee Burlin and E. A. Overbeke. Regatta committee—W. R. Huntington, F. G. Overbeke and G. H. Gardner. Auditing committee—J. R. Miller, Horace Foote and J. E. Hannon. Entertainment committee—Burton D. Munhall, A. R. Landreth F. W. Roberts.

The tonnage brought into Cleveland by rail, lake and canal during 1897 was nearly 2,000,000 tons in excess of the traffic received in the preceding year. According to statistics prepared by the Chamber of Commerce the shipments via the three channels show an increase of over 1,000,000 tons compared with 1896 and less than 900,000 tons over 1895. The year 1895 was slightly better as regards the freight movement than the following year. During the year Cleveland received 207,906 tons of anthracite coal, 3,798,305 tons of bituminous coal, 503,935 tons of coke, 36,211 cars of lumber and other forest products, 109,047 head of cattle, 999,219 hogs, 183,717 sheep, 3,423,369 bushels of wheat, 3,737,660 bushels of corn, 4,323,659 bushels of oats, 484,285 bushels of barley.

Bituminous coal shipments showed an increase, the movement having been 2,099, 463 tons, against 1,830,665 tons for 1896; iron ore shipments were 2,169,621 tons; petroleum, 1,003,242 barrels, pig blooms and railroad iron 318,535 tons, other iron and castings, 417,096 tons.

FLOTSAM, JETSAM AND LAGAN.

Capt. Ralph C. Brittain is reported to be building a tow-barge at Saugatuck.

The steamer American Eagle, which has been laid up at Sandusky, will make a trip to Put-in Bay on Thursday and after making a few trips carrying cargo will again be laid up until the early opening of navigation.

Capt. Elleson, of Port Stanley, Ont., reports that the steamer Flora, tugs Crawford and Snowstorm, besides the schooners John Kelderhouse, Ganges, Nassau and Mary Everett are in winter quarters at that port.

A handsome colored picture, 18 by 14 inches, of the North German Lloyd steamer Kaiser Wilhelm Der Grosse has been received by the RECORD this week from the New York agents. The King William the Great is 648 feet over all, 66 feet beam and 43 feet deep, tonnage 14,000 and displacement 20,000 tons.

Mrs. Joseph M. Lang's husband was burned to death on the steamer City of Kalamazoo, at South Haven, Mich. She charges negligence and has sued the Williams Transportation Co. for $20,000. If successful another $20,000-suit will be brought for the death of Rose Goins, who lost her life in the same fire.

A private dispatch from Chicago states that wooden vessels were chartered there Friday for corn at 2½ cents. Also that large steel vessels are being offered for 2⅜ cents on corn, to load at South Chicago. The number of vessels thus far placed under charter at Chicago is said to be between 60 and 70.

Although one of the Conneaut car ferries is now under charter at Milwaukee, owners of the vessels are planning to have both of them in service on Lake Erie again next season, running from Conneaut to Port Stanley, Ont., as well as to Port Dover. Hingston & Woods, dredging contractors of Buffalo, have a contract for dredging at Port Stanley, which is to be completed early next season so as to admit of car ferry service at that point, which is nearer to Conneaut than Port Stanley.

Capt. D. E. Stevens, of Duluth, has been elected delegate to the Grand Harbor of the Masters' and Pilots' Association, which will be held in Washington, Jan. 18. All meetings of the Grand Harbor are held at the national capital. It is expected that the council will consider several matters that require Congressional action.

It is believed at the naval department that the showing made not only on constructor Bowles, but by the board of civil engineers, recently appointed, as to the faulty character of the work in the construction of dry dock No. 3 at New York will result in taking steps to court martial civil engineer A. G. Menocal. It is not certain whether or not it will be possible to proceed against the contractors.

The American Liner City of Paris has been in the dry dock at Newport News for the past two weeks, with 500 men working on her. The vessel has been thoroughly overhauled in preparation for the spring traffic. The St. Paul, of the same line, will leave New York Jan. 16 for his annual overhauling. The St. Louis and New York will follow in order.

According to a cable dispatch received at New York, the Hamburg-American line has ordered a sister ship of the Pennsylvania and Pretoria, the largest carriers in the world. These ships are of 14,000 gross register tons and 23,600 tons displacement. The company has also contracted for two other steamers of 10,000 gross register tons each. These three ships will be laid down at the yards of Blohn & Voss, in Hamburg.

Capt. James Owen, who last season had charge of the steamer G. W. Morley, which burned off Evanston, Ill., in December, is at Milwaukee, looking after the repair work found necessary on the steamer Iosco, as the result of her stranding on Grey's Reef. Capt. Owen will command the Iosco next season vice Capt. James L. Bradshaw.

At a special term of the United States circuit court with Judge Lochren, of Minneapolis on the bench, condemnation proceedings for the purpose of widening the ship canal at Duluth came up. A commission, consisting of C. H. Graves, E. R. Jefferson and C. R. Hales, was appointed to condemn the land on either side of the canal in order to make ready for the government's improvements there.

A steamer was passing by a settlement on the shore of one of the Great Lakes, and along the water front were a few houses built out on piles, says the Boston Budget. An old man and an old woman, evidently traveling that way for the first time, stood by the rail. Presently the woman noticed one of the houses built over the water. "Well, my gracious, Henry," she exclaimed, "just look at that house! 'Sposin' somebody's taken sick in the night and they have to run for the doctor! Built right out in the solid water! Oh, my Lord!"

At a meeting of Harbor No. 43, Toledo, Masters' and Pilots' Association, a surprise was in store for Capt. Al. Fitts, who so faithfully served while occupying the position of captain of the Harbor. After receiving his instructions as delegate to the national convention at Washington, D. C., an elegant gold badge was presented to him. The badge is in the form of a circle, around which is a rope of gold. The badge has a black field on which anchors are crossed and a gold star, in the center of which is a representation of the sun. Above the badge is a bar on which appears "Albert Fitts." Dependent from this by a gold ring is the badge proper. It is a very handsome and a costly souvenir. On the reverse side of the badge is engraved the name of the Harbor and date of presentation.

DETROIT ADMIRALTY DOCKET.

United States District Judge Swan, of Detroit, has made the following assignment of admiralty cases for the January term, the first to be taken up January 17:

Monday, Jan. 17—4375, Charles J. Donnelly vs. barge Bay City; 4603, Clark Dry Dock Co. vs. Clark, owner of schooner Lone Star, principal defendant, and Alex. M. Salliotte et al., garnishee defendants; 4464, George Taylor vs. schooner B. L. Pennington.

Tuesday, Jan. 18—4343, Hans Krause and Mark H. Hanlon vs. steamer F. & P. M. No. 2; 4391, Louise B. Grummond, etc., vs. barge Leland; 4561, James McBrier et al. vs. steamer J. H. Devereaux.

Wednesday, Jan. 19—4547, United States vs. tug Martin Swain; 4617, St. Clair County Savings Bank vs. propeller Thomas D. Stimson.

Thursday, Jan. 30—4661, Robert and Eugene Shook vs. Francis F. Palms et al.; 4671, Ephraim Nelson vs. steambarge George King; 4672, Ephraim Nelson vs. barge Levy Rawson; 4675, Boydell Bros.' White Lead and Color Co. et al., intervening vs. steamer State of Michigan; 4678, William Smith and William Yendell vs. steamer Ohio.

Friday, Jan. 21—4636, Edmund Hall vs. steamer Rufus P. Ranney: 4697, Edmund Hall vs. propeller J. H. Wade.

Tuesday, Jan. 25—4698, Peter P. Miller et al. vs. propeller George W. Roby and schooner William D. Becker.

Wednesday, Jan. 26—4700, Dan Huyck vs. tug Martin Swain; 4701, Dan H. Huyck vs. steamer State of Michigan; 4711, William Abbott vs. schooner Home; 4712, David Manning et al. intervening vs. schooner Home; 4713, William Bothgate vs. Sandsucker, Ohio.

Thursday Jan. 27—4714, Edmund Hall vs. tug J. C. Martin and barge Bavaria; 3727, the Buffalo Ship Chandlery & Supply Co. et al. intervening vs. schooner George L. Colwell; 4728, same vs. steamer A. D. Hayward.

Friday, Jan. 28—4737, the State Bank of Tonawanda vs. steamer A. D. Hayward and schooners Manitowoc and George L. Colwell.

Saturday, Jan. 29—4438, U. Grant Grummond vs. Abram Smith et al.

WINTER MOORINGS.

CHICAGO.

Steamers.—Argo, Arizona, Aurora, W. J. Averell, Bermuda, C. F. Bielman, Canisteo, William Chisholm, City of London, Commodore, Delaware, L. R. Doty, William Edwards, Elfin Mere, Escanaba, J. H. Farwell, Germanic, J. M. Glidden, W. H. Gratwick No. 1, Gratwick No. 2, G. Hadley, W. A. Haskell, Helena, Hesper, Inter Ocean, Iron Age, Iron Duke, Iron King, Iroquois, H. R. James, H. J. Jewett, Kalkaska, W. P. Ketcham, S. Langell, J. R. Langdon, Lansing, Livingstone, Louisiana, Madagascar, Mahoning, Milwaukee, A. McVittie, J. J. McWilliams, Mecosta, Fred Mercur, P. Minch, Minneapolis, J. Mitchell, W. B. Morley, Niagara, Nicaragua, Niko, Normandie, Nyanza, John Oades, Oceanica, Onoco, George N. Orr, J. Emory Owen, Panther, A. A. Parker, T. W. Palmer, Penobscot, Pentland, Phœnix, H. S. Pickands, J. H. Prentiss, Progress, Raleigh, Roumania, Sachem, Samoa, Servia, Shenandoah, John C. Spry, Starrucca, St. Paul, St. Lawrence, Tampa, A. D. Thomson, Toltec, Tuscarora, H. A. Tuttle, Vanderbilt, Venezuela, Viking, J. H. Wade, D. C. Whitney, Yakima, Yale, George Dunbar, Fayette, Jay Gould, S. K. Martin, H. B. Pereue, Sanilac, Albert Soper, G. W. Westcott, H. L. Worthington.

Sail vessels.—Abyssinia, Ada Medora, Adriatic, Algeria, Cheney Ames, Arenac, Ashland, Athens, J. J. Barlum, J. G. Blaine, G. J. Boyce, Carrington, Celtic, Churchill, City of Sheboygan, D. C. Clint, Cora A, Crete, Dundee, F. D. Ewen, Charles Foster, Golden Age, Grenada, G. Hartnell, E. C. Hutchinson, Interlaken, Iron City, Iron Cliff, Iron Queen, Iron State, J. T. Johnson, Lake Forest, L. A. Law, Lotus, S. J. Luff, Martha, John Martin, E. B. Maxwell, M. E. McLachlan, J. H. Mead, Michigan, Middlesex, Miztec, A. Mosher, Naiad, Fannie Neil, Northwest, Olive Jeannette, "115," Paisley, B. W. Parker, Plymouth, D. P. Rhodes, J. H. Rutter, Scotia, Minnie Slauson, South West, S. M. Stevenson, A. A. Stewart, George Sturges, Vinland, Wadena, Wayne, R. Winslow, Yukon, Alice, America, Apprentice Boy, B. Calkins, R. Campbell, Cape Horn, City of Chicago, City of Toledo, Clara, May Collins, A. M. Beers, Belle Brown, Bertha Barnes, E. R. Blake, J. L. Boyce, A. Bradley, T. J. Bronson, Butcher Boy, Louie A. Burton, Elgin, Evaline, Guide, N. O. Goodman, Ford River, Four Brothers, G. M. Filer, D. L. Filer, C. H. Hackley, Hattie Hutt, Ida, O. R. Johnson, William Jones, J. V. Jones, Jura, M. Dall, Iver Lawson Libbie Nau, D. R. Martin, John Mark, Magdalene, C. J. Magill, John Mee, Mediator, J. B. Merrill, C. Mickelson, John Miner, A. G. Morey, R. Mott, Truman Moss, G. W. Naghton, Norman, Olga, Parana, Penobscot, Jessie Phillips, Resumption, H. A. Richmond, Z. G. Simmons, Stampede, E. M. Stanton, Stafford, Geo. Steel, Horace Taber, J. V. Taylor, Annie Thorne, Vega, J. B. Wilbur, Ellen Williams, H. C. Winslow, Winnie Wing, Wonder, S. A. Wood, York State.

SOUTH CHICAGO.

Steamers.—Crescent City, Selwyn Eddy, Frontenac, H. J. Johnson, S. R. Kirby, Lagonda, C. B. Lockwood, Thomas Maytham, Merida, New Orleans, I. W. Nicholas, E. W. Oglebay, Maricopa, Marina, Mariposa, E. C. Pope, Scranton, Senator, Wilhelm.

Sail vessels.—Australia, Galatea, Marcia, C. P. Minch, Nirvana, George B. Owen, Polynesia, Magna, Tasmania.

TOLEDO.

The following vessels are wintering at Toledo: Steamers George J. Gould, S. C. Reynolds, John C. Gault, Russell Sage, David W. Rust, Superior, J. S. Fay, Sarah E. Skeldon, Saginaw, Volunteer, Gettysburg, Sadie Sheppard, Metropolis, Douglass, Messenger, Swansea, Visitor, Grandon; schooners B. P. Locke, Arthur, W. H. Rounds, St. Peter, Thomas Dobbie, W. H. Badger, Maumee, Valley, Tokio, J. A. Francombe, Mineral State, William Brake, H. C. Sprague, William Case, Fontana, Massasoit, J. I. Case.

OFFICERS ELECTED M. E. B. A.

The following officers were elected for this year at No. 44 branch Marine Engineers' Benevolent Association, Manistee, Mich.: President, Wm. R. Patterson; vice-president, H. F. Otto; treasurer, Richard Winkler; recording secretary, James Meyers; financial secretary, Frank Winkel; corresponding secretary, Chris. Dahl, 534 Second street; chaplain, Henry Hall; conductor, Frank McMillan; doorkeeper, Earle Terrin; trustees, H. F. Otto, Wm. R. Patterson, Thos. Collins; representative, Wm. R. Patterson.

Toledo branch: President, Bert Ransom; vice-president, Alpha Page; recording secretary, James L. Aznoe; corresponding and financial secretary, E. D. Lock; treasurer, F N. Wise; conductor, Eugene Pasano; D. K., F. J. Cuuningham; representative to the national congress at Washington, D. C., James L. Aznoe. The officers elect will be installed next Friday evening.

Sturgeon Bay, Wis. branch: President, A. Coffrin; vice-president, Wm. Helmholtz; recording secretary. E. Weber; corresponding secretary, C. O. Chapman; financial secretary, H. Devine; treasurer, F. A. Ives; conductor, F. Kimber; doorkeeper, O. Sanders; chaplain, H. Dumane; outer doorkeeper, Joel Ashby; board of trustees, F. A. Ives, Wm. Helmholtz, and O. Sanders; representative, O. Sanders.

At the annual election of officers of the M. E. B. A., No. 1, Buffalo, the following officers were elected: James L. Walker, president; William Meade, vice-president; Peter Burns, financial secretary and treasurer; Geo. M. Campbell, recording secretary; Theo. A. Meyers, corresponding secretary; M. F. Hannon, doorkeeper; James Wixted, conductor; Friedrich Hale, chaplain; Theo. A. Meyers and Alfred E. Welch, representatives to the national convention to be held at Washington, D. C., Jan. 17 to 23d, 1898.

M. E. B. A. No. 92, East Saginaw, Mich., installed officers for this year as follows: past-president, Joseph D. Budd; president, Geo. A. Thrasher; vice-president, Joseph Huber; chaplain A. G. Moll; treasurer, Chas. A. Morgan; corresponding secretary, Joseph D. Budd; recording secretary, Peter McLearn; financial secretary, Walter A. Henry; conductor, Wm. H. Herbert; doorkeeper, Fred Pflueger; representative, John Henry.

FRENCH SHIPPING BOUNTIES.

The tonnage of the combined entries and clearances (with cargo) of France for 1896 amounted to 24,350,000 net tons, of which 15,900,000 tons were foreign shipping. The navigation dues imposed by France for the year amounted to 13,656,655 francs, of which foreign shipping paid approximately two-thirds. The bounties paid by France to French shipping amounted to 13,680,731 francs, by coincidence a sum almost exactly equal to the revenue derived from the various navigation dues, paid chiefly foreign vessels.

A RAM IS BETTER.

It took 70 shots at close range, including a number from the 9.2-inch caliber gun, before the British cruiser Edgar could sink a derelict tank steamer in the Red Sea. Naval men are trying to figure out how many shots would have been needed if the Edgar had been dealing with a hostile cruiser of her own class.

A FEW TIPS FOR THE LAKE CAPTAIN.

Under the above caption the Advocate, Sturgeon Bay, Wis., prints the following pertinent communication from a Manitowoc correspondent:

Do not imagine that after your compass has been adjusted that you can steer a chart, or true course, without so much as even allowing for the magnetic variation between the departure and destination. The principal object in adjusting compasses is to reduce large deviations to a minimum, to bring them within manageable limits, thus equalizing the directive forces, preventing sluggishness and to cause more readines of movement of the compass. Perfection is not always attainable owing to the arrangement of the needles of some makes of compasses, and as there is always some residual errors remaining after adjusting, which to ascertain it is necessary to swing the vessel to all points of the compass and compare courses with azimuths, or well known bearings. And from these comparisons a table of deviations should be constructed and when the vessel's course is set, these together with other compass corrections (not errors) should be allowed to the true course, and the result after these allowances have been made gives the compass course, which in reality is the true course sought. Jotting down courses, compass corrections cannot be formed, because of leeway and current interfering, but persons not trained in navigation use this method, ignorant of its fallacies.

When you hire a compass adjuster to compensate your compass give him all the time there possibly is. He needs it. Do not imagine that adjusting a compass to meet the requirements of the vessel is as easily accomplished as washing down a deck, or something in like order. The magnetic forces in no two vessels act the same on the compass in accordance with well established laws. The compass expert goes according to these well-defined laws until he meets with an obstacle, (and he meets with lots of them) then his work becomes an experiment. The laws of magnetism are varied, and while one method will work all right in theory it will not work in practice. None but those who have attempted to do such work will be able to appreciate the logic herein contained. With ample time a good compass adjuster can reduce the error by compensation to the minimum. This puts the writer in mind of a job he had during the season just passed. Heading north, the boat in question, was out 6¼ points, and at east 5¾ points. A heel of 3° caused a heeling error of ⅜ of a point. It seems that in making the run to this port for this purpose, the fuel was taken out of only one and the same bunker, thereby causing the list. The owner of the boat, being in a big hurry of course, to get through and away to work again, wanted done only what could be accomplished in about three hours. The compass was compensated only for semi-circular deviations, and strange to say, after the boat was swung to every reading of the compass and azimuths of the sun taken the greatest error was 3°, and this on the quadrantal points. Eighteen out of the thirty-two points the deviation, or residual error, was practically nothing, in no case amounting to so much as 45′, and on twelve points reverse courses could be steered. Had the quadrantal and heeling errors been compensated for it is highly probable that there would have been no use for a table of errors. The compass was very sluggish before the adjustment was made, but after it was sensitive in smooth and steady in heavy weather, and for this reason only, every compass ought to be adjusted.

The necessity of a thorough training in the rudiments of navigation must be apparent. Without such training nobody is able to intelligently navigate a vessel and keep her out of danger in thick weather, the numerous strandings in proof thereof. "Aids to navigation in thick weather avail nothing, and as fog signals can not be depended upon, it is incumbent upon every navigator to find without such aids by a safe route the place of destination. The key to this route, and how to keep the vessel on it, is furnished by scientific training, which, under all conditions and circumstances, is a never-failing and superior aid to navigation."

(It would be interesting to learn how many of the local inspectors of hulls, who grant licenses to masters and mates, could examine candidates regarding their theoetical and practical knowledge of the law of magnetism as it affects the compass needles. Now that the building of iron and steel vessels is the rule, such an examination is highly necessary.—Ed. M. R.)

TREASURY DECISIONS RELATING TO VESSELS

Discriminating duty on foreign goods under section 22, act of July 24, 1897, imported into the United States from Canada and Mexico.

TREASURY DEPARTMENT, Oct. 29, 1897.

SIR: In reply to your letter of the 21st inst., I have to inform you that all foreign goods, not Canadian or Mexican, imported into the United States from Canada, are subject to the discriminating duty of 10 per cent. ad valorem under section 22, act of July 24, 1897, except such goods as are shipped to the United States via Canada, and merely pass through that country en route to their destination.

Respectfully yours, W. B. HOWELL, Assist. Sec.

Collector of Customs, Bangor, Me.

Duty attaches to amount in excess of $100 of articles purchased abroad by returning residents of the United States, whether such excess results from valuation of one article or more.

TREASURY DEPARTMENT, Oct. 13, 1897.

SIR: Replying to your letter of the 8th inst., the department has to advise you that whenever a citizen of the United States, returning from a trip abroad, brings in more than $100 worth of wearing apparel, purchased abroad for his own comfort and convenience and immediate use, he should be required to pay duty upon such excess over $100, whether such excess shall result from the valuation of one article or of more than one. In the instance cited by you, the value of the garment in excess of $100 will be dutiable, it being understood that otherwise the same is admitted free under provisions of paragraph 697. Respectfully yours,

O. L. SPAULDING, Assist. Sec.

Collector of Customs, Burlington, Vt.

Approving bond of the Port Huron and Washburn and Duluth line of steamers as a common carrier for the transportation of appraised merchandise in bond.

TREASURY DEPARTMENT, Oct. 11, 1897.

SIR: The department has received your letter of the 4th inst., with which was enclosed the bond, in duplicate, of the Port Huron and Washburn and Duluth line of steamers as a common carrier for the transportation of appraised merchandise in bond. The bond is hereby approved, and one copy thereof herewith inclosed to be placed upon the files of your office.

Under this bond the line of steamers named is authorized to transport appraised merchandise between your port and Duluth, Minn., in the steamers Colorado and Oceola, or other vessels owned and controlled by said line and plying on Lakes Huron and Superior and rivers tributary thereto.

Respectfully yours, O. L. SPAULDING, Acting Secretary.

Collector of Customs, Port Huron, Mich.

Fish caught in Canadian waters of the Great Lakes by citizens of the United States free of duty under paragraph 555 of the act of 1897.

TREASURY DEPARTMENT, Oct. 9, 1897.

GENTLEMEN: The department duly received your letter of the 2nd ultimo, and has had the matter referred to therein under consideration. You complain that fresh fish imported at the port of Sandusky, Ohio, are admitted free under paragraph 555 of the act of July 24, 1897, while similar importations made at Erie are subject to duty.

It appears from a report received from the collector at Sandusky that the fish which are allowed free entry by him are admitted upon an affidavit made by the importer that the same are caught in the Great Lakes or other fresh waters by citizens of the United States. As further evidence of the veracity of the statement so made, the collector has required an affidavit upon each entry from the men who caught the fish, setting forth that they are citizens of the United States.

The department is informed that the Canadian Government permits no commercial fishing in Dominion waters by residents of Canada or citizens of the United States except under license, the charge being $50 per annum for each net, and licenses are issued only to Canadian citizens. It is therefore incumbent upon all Americans who own fisheries in Canadian waters to operate them upon licenses issued in the names of residents of the Dominion, who, by tacit consent of the Canadian authorities, may transfer their rights to Americans. While this may be regarded as an evasion of the British fishery laws, the Department is not called upon to take part in any contention on this question.

The department holds, therefore, that when the fish are caught in the Canadian waters of the Great Lakes by citizens of the United States they are entitled to free entry under paragraph 555.

It further appears that the fish imported by you at Erie are bought from Canadians, and that your company employs Canadians to fish for your supplies. There is therefore no analogy between the importations at Sandusky, above described, and your importations at Erie.

Respectfully Yours, O. L. SPAULDING, Acting Secretary.

SANDUSKY FISH CO., Erie, Pa.

Department can not exempt steam vessels of the naval militia from the general provisions of the steamboat laws.

TREASURY DEPARTMENT, Oct. 12, 1897.

SIR: The department is in receipt of your letter of the 20th ultimo, suggesting the granting of certain privileges to officers of the naval militia of New York State, in the matter of officering steam vessels under their charge, contrary to the requirements of the laws and the rules and regulations governing the officering of merchant steam vessels, giving as a reason therefor that many of the officers of the naval militia of the State of New York "are graduates of the United States Naval Academy, and some of whom have held lieutenants' commission in the regular navy," and "find themselves unable to take over the command" of vessels belonging to, or temporarily in use by the naval militia, "without conflicting with the letter of the law."

In reply, you are informed that the law presumably referred to by you, section 4,400 Title LII, Revised Statutes, specially exempts certain vessels from its provisions, namely, public vessels of the United States, vessels of other countries (except those "carrying passengers from any port of the United States to any other place or country)," "and boats propelled in whole or in part by steam for navigating canals," therefore leaving no discretion in this department to exempt any other class of vessels from the general provisions of the steamboat laws. Amongst other provisions included in Title LII, Revised Statutes, is that of section 4438, which provides that for steam vessels other than those above excepted, "It shall be unlawful to employ any person to serve as a master, chief mate, engineer, or pilot on any steamer who is not licensed by the inspectors; and any one violating this section shall be liable to a penalty of $100 for each offense."

Under the existing conditions of the laws and regulations, the department can only refer the officers of the naval militia to Congress for the relief they claim from the present alleged hardships of the law, the department being powerless in the matter. Respectfully yours, L. J. GAGE, Secretary.

HOWARD PATTERSON, ESQ., Principal New York Nautical College, 130 and 132 Water street, New York, N. Y.

TACOMA COMMERCE.

The Tacoma Chamber of Commerce has prepared the following condensed statement of the foreign and coastwise trade of that port for the year 1897 from monthly reports of the harbormastre:

IMPORTS.	Value.
Twenty cargoes of Oriental merchandise from China and Japan	$8,125,953.61
Total imports for 1896	5,807,478.12
EXPORTS.	**Value.**
4,285,008 bushels wheat	$3,573,612.00
313,737 barrels flour	1,110,068.18
84,656,474 feet lumber	785,419.75
363,339 tons coal	1,125,602.50
Merchandise to China and Japan	1,893,992.65
Merchandise to Alaska and British Columbia	710,482.14
Total exports, 1897	$9,199,177.22
Total exports, 1896	8,827,270.48

Inward registered tonnage, 645,089; outward registered tonnage, 614,465; inward cargo tonnage, 90,075; outward cargo tonnage, 703,239; deep sea arrivals, 475; departures, 460.

THE KEY TO KLONDIKE.

Anticipating the probable rush in the spring, the northern Pacific Passenger Department, St. Paul, Minn., has just issued a most complete and comprehensive folder on the Alaskan gold fields, which is called "The Key to Klondike." The Northern Pacific Co. has had a representative at work for some time securing the most accurate and up-to-date information about the Klondike, and it is gotten up in an attractive and interesting manner. Included is a brief story of Klondike, the Yukon river and the placers, the methods of mining, together with time and distance tables of the ocean and Yukon steamers, and those via Dyea and Chilkoot pass. In addition to quoting a number of changes and improvements in the facilities for reaching the coveted grounds, the folder contains some new information regarding the passes, and in conclusion has the following: It is now definitely settled that a railway from Dyea to mouth of Dyea canyon—8 miles—and an aerial tramway—8½ miles—from Dyea canyon across the Chilkoot pass to Crater Lake, will be built. Contracts are let, work is in progress, and the road and tramway are expected to be in operation by February 1, 1898. The capacity of this tramway will be 200 passengers and 120 tons of freight every 24 hours. In 24 hours from landing from steamer at Dyea, men and their outfits can be set down at Lake Lindeman. This means a great saving of time and expense via this route.

EASTERN FREIGHT REPORT.

Messrs. Funch Edye & Co., New York, in their weekly freight report to the RECORD state that the turn of the year has, we are pleased to be able to report, developed a much improved demand for steam tonnage generally, and, at the moment, the inquiry for January boats is fully up to the amount of available tonnage, with some indication of an extension of this inquiry into February. Freight quotable for January loading of grain to Cork f. o. has advanced to 3s. 7½d., for February to 3s, 6d., whilst large boats continue in request at from 3s. @ 3s. 1½d. for January, 3s. for February. There is a fair inquiry for January tonnage applicable to cotton charters, both from the Gulf and the Atlantic ports. Whilst rates are not quotable higher, and lighter supplies of cotton keep the berth rates for parcel lots to very close figures, it appears not unlikely that charter rates may generally stiffen up somewhat for this business. The demand for timber boats is dormant at the moment, pending some concession in freight on part of owners; the last fixture of a case oil steamer from Philadelphia to Japan shows an advance of 1 cent secured in excess of charterers' expressed, and for some time maintained, offering rate.

We have nothing to say in regard to sail tonnage, the market for which remains firm, without any particular change in rates. The demand is fairly active, except for oil vessels to Europe, which branch continues dull and neglected.

TO DEEPEN THE CHICAGO RIVER.

A joint committee representing the city council, the city administration and the various business interests of Chicago has drafted a memorial to Congress asking for a $400,000 appropriation for the purpose of making a 20-foot channel in the Chicago river. This memorial was drawn up by Mayor Harrison, Capt. J. S. Dunham and Martin B. Madden; it will be first submitted to the committee on harbors and bridges and then to the council for approval. Following are some of the extracts from the memorial:

"The city of Chicago most respectfully petitions for the extension of the 20-foot channel to the railroad docks, elevators, coal yards and manufacturing industries along the Chicago river, which since the establishment of the municipality here has been its harbor.

"During the season of 1897, vessels engaged in the general trade on the Great Lakes carried 50,000,000 tons. With the usual increase in traffic, commerce in 1899 will be about 60,000,000 tons. It is asserted that no such volume of freight is transported either by rail or water in a like district in any part of the world. Without disturbing other lines of traffic, vessels can take fully 10,000,000 of grain a week out of Chicago and can blockade every railroad leading to the seaboard from Lake Erie with a flood of grain. They have proved their ability to carry a coal supply to the northwest within six weeks after the end of a great strike. In short, the capacity of the lake fleet is only limited by the terminal facilities for the handling of freight at either end of the route.

"We assert with great confidence that the river is as important to the West in the matter of cheap transportation as it has been at any time during the last 60 years. * * * * Shipments covering the season of navigation now closed and the eleven months ending November 30 are: By lake, 3,781,744 tons; by railroads, 1,401,269 tons.

"Over the LaSalle street tunnel there is a channel 62 feet wide, giving a depth of 17 feet, 'Chicago datum,' or 17.8 feet 'mean lake level.' Over the Washington street tunnel there is a channel giving a depth of 16 feet, 'Chicago datum,' or 17.8 feet 'lake level.' It will thus be seen that the task of changing the tunnels to meet the demands of the 20-foot channel is much less than has generally been anticipated.

"In order that the 20-foot channel may be accepted as a legally specified depth of the Chicago river we earnestly request that an amendment to the river and harbor act of June 3, 1896, be adopted which will make it read as follows:

" 'For improving Chicago river, Illinois, continuing improvement—four hundred thousand dollars ($400,000); and the Secretary of War is authorized to enter into contracts for dredging the channels of the main river and branches to admit passage by vessels drawing 20 feet of water, provided that the total expenditures on said river shall not exceed the sum appropriated by the act of Congress of June 3, 1896.' "

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CLEVELAND, O., JANUARY 13, 1898.

THE shipyard and dry dock at West Superior, Wis., is fast becoming an industry of national importance.

A BOSTONESE, Mrs. Winslow, has accepted the invitation of Secretary Long to christen the U. S. S. Kearsarge. Mrs. Winslow is a sailor's wife, otherwise only virgin maidens chime in with Jack's notions of appropriate ceremonies on such an occasion.

THERE is a noticeable falling in the surface of Detroit river this week and guage readers say that it is about a foot below the normal level. Either the engineer or hydrographic officers might note the effect and advise those interested in marine matters regarding the cause.

THE commercial statistics of Portage Lake ship canals, Lake Superior, Mich., compiled by Major Clinton B. Sears, Corps of Engineers, U. S. A., for the season of 1897, a synopsis of which is printed in our current issue, is to be classed among the reliable and important data of lake commerce.

OFFICERS have been detailed to take charge of branch hydrographic offices at Sault Ste. Marie and Duluth. With the estimable work carried on by the Corps of Engineers, U. S. A. data gathered by the Hydrographic Officer U. S. N., combined with the records and observations of the Weather Bureau Department of Agriculture, there is a direct possibility of the physical geography of the Great Lakes being determined in the very near future.

DURING the past four years 38,828 tons of foreign-built vessels have been admitted to American registry, compared with 64,778 tons for the previous four years. Of this total of 103,606 tons for eight years, 55,902 tons were admitted by special act of Congress, including the act admitting the Paris and New York, and 47,704 tons were admitted as repaired wrecks by the Bureau of Navigation, 21,175 being admitted during the past four years.

ANY port that wishes to increase its shipping facilities should be willing and eager to stand a portion, if not all, of the expense of improvements, as the financial returns are chiefly local. There is a danger of overdoing this federal appropriation business for what is, after all, exclusively to the benefit of private interests. The conservancy and improvements of rivers and harbors placed under the jurisdiction of the Secretary of War and admirably carried out by the officers of the Corps of Engineers, U. S. A., extends only to the harbor limits, nor need these officers penetrate the city, or any port estuaries, in the capacity of garbage cleaners, on territory that is within the municipal limits.

ACTUAL OR CONSTRUCTIVE LOSS.

The English-built and Canadian-owned steamer Rosedale that stood such a severe shaking up on East Charity Shoal or Reef and was said to be a cheap, flimsy-built craft is now in dry dock at Kingston and it turns out that she is even a stronger built vessel than the rules of some of the best classification societies call for. She has been declared a constructive total loss, however, on account of heavy bottom damage, insured for $75,000 placed chiefly with foreign underwriters. It is difficult to see how the craft can be considered even a constructive loss, unless the heavy wrecking bills with loss of freight and cargo can be, or are, added to the cost of repairs and the total sum thus made to exceed fifty per cent. of the insurance, a feature which, no doubt, would even then amount to a fairly general rebuild, and she could be handed over to her former owners in like good order and condition as she was previous to the stranding. We believe that she has now been accepted by the underwriters' agents as a constructive total loss and will be disposed of to the highest bidders, probably or possibly her former owners. It may be assumed that casualties of this sort are of no direct moment to the marine public and rests entirely between the assurer and assured. Such is not the case in its entirety, however, for the basis of a settlement in one instance frequently establishes a precedent for others, and, although in the ultimate settlement the individuals alone are concerned, a wide iuterest is always manifested in the manner in which a mutually amicable settlement is brought about. It is easy to perceive that if the Rosedale had come off the reef structurally uninjured, the jettisoning of part of her cargo, wrecking, assistance, towing bills, dry docking, surveys, etc., would all be classed under the head of average, either general or particular, and so apportioned between ship, freight and cargo, irrespective of any insurance on the hull. It is further easy to understand that if the estimated value of the damaged hull is less than the cost of repairs and the outlay exceeded the clause limit of indemnification written on the insurance policy, the risk might be considered a loss constructive, but where a possible two-thirds can be saved by the expenditure of one-third, other issues must be brought to the front to make up a constructive total loss, not even to mention an actual loss of the entire amount insured for. Quite a widespread interest is now being manifested in the settlement of these casualty and damage cases, and while in this particular instance there are only rumors of what has been or will be done, and reports stating that the vessel was owned by, or given up to the wrecking company, and other reports that she would be sold as she lay to the highest bidder, there is no valid or pertinent reason why all the facts in such cases should not be brought to the surface and given due publicity for the benefit of all parties interested in shipping.

ASKING FOR WHAT'S NOT WANTED.

Sometimes people ask for and really appear to want something that is not for their benefit or advantage to have. It is said that a committee of the Cleveland Chamber of Commerce seems somewhat miffed because Lieut. Comdr. Hamley, U. S. N., opened temporary stations last summer at Duluth, Milwaukee, Chicago, Detroit, Bay City and Buffalo, and skipped Cleveland. It is further stated that in recommending Chicago as the most desirable location for a naval recruiting station Lieut. Comdr. Hamley did not thoroughly consider the advantages of Cleveland. The Navy Department was satisfied that the lakes could supply the quality of men wanted for service, and the expectations were realized. Yet it is well known that only the best men are eligible for naval service. In ignorantly whimpering about Cleveland being slighted, the argument is brought forward that Chicago is comparatively isolated. Its trade with Lake Superior is limited, while Cleveland is on the direct route of commerce between all the lakes. The fact that a majority of lake tonnage is owned in Cleveland and that the principal shipping office of the Lake Carriers' Association is at that port is cited to prove the advantages of the Lake Erie port.

Now, if this Chamber of Commerce committee would only consider that it has cost individual vessel owners, the Cleveland Vessel Owners' Association and the present Lake Carriers' Association vast sums of money in the aggregate to bring men up to the standard of lake navigation it would not perhaps be so eager to have a naval recruiting agency established in Cleveland.

The deck hands, watchmen and wheelsmen of to-day are the pilots and masters of the morrow, the shop apprentices, firemen, oilers and assistants also make chief engineers, where, therefore, is the good reason or necessity for petitioning the Navy Department to rob the home market by establishing permanent stations so as to pick up the most likely metal and talent available now and in the future at any of the principal lake ports?

It would appear that this Chamber of Commerce committee had not taken into account the large sum annually expended by lake vesselowners in paying traveling expenses for men to mann their vessels, also in keeping open shipping offices as a means of having help of all grades at hand when required. The naval officer did not visit Cleveland or attempt to open a temporary recruiting station and it is, perhaps, just as well for the owners of vessels that he did not, or it may prove so next spring.

The U. S. Navy is not absolutely compelled at this time to standardize, accept and ship the scum, roosters, roustabouts and generally worthless elements from the lakes to the seaboard, rather is it after the physically perfect and mentally brightest manhood that it can obtain. Hence, instead of seeking to donate, as it were, in time of peace, commercial progression and maritime supremacy, the best future talent of the lakes in brain and muscle, it would seem the more reasonable part not to give too much encouragement to naval enlistment stations at any lake port. This is one standpoint from which the intended departure can be viewed, at this time; later, Cleveland may become the emporium of the lakes and furnish the requisite quota of men to the navy, naval reserve or any auxiliary body requiring drilled, skilled flatfeet, and, when the supply is available the demand cannot be too great for general prosperity, but, until such a time arrives no more deportations or importations is absolutely essential for the best interests of the lake marine.

CONTRACTS for small sized and local tonnage are being regularly placed at lake shipyards, and figuring is very close on two or more large cargo steamers, besides a high classed speedy passenger steamer for a new route, or rather one that has not as yet been developed. We are pleased to note that both American and Canadian shipyards are about filled with new work, besides the usual winter repair and overhauling jobs, some of which are rather extensive. The dry docks are also getting a fair share of business, and at a few of the yards a good sized fleet is booked well ahead, and will take their turn in due order. Less than two weeks' has elapsed and yet the table of new tonnage prepared by the RECORD January 1, could be revised, although we eliminated nearly all the small fry, such as craft of under 100 tons, as well as canal barges, scows, minor tug boats, etc. This feature goes to show that he tlake commerce can't be held down. Shipowners and builders are keeping well in the vun of transportation requirements, and connecting industries, especially in the engineering and mechanical branches are kept well up to the standard, if not a trifle in advance of the times, in furnishing equipment and outfits. Owners of vessel property are now placing contracts for steamers of from four to five hundred feet in length, of from five to six thousand tons carrying capacity on a moderate draft. Shipbuilders have fitted their plants with powerful and expensive machines, tools, labor saving devices and appliances so as to accelerate and facilitate work. Engine shops, electric works, boiler works, and other branches of mechanism can now compete with similar industries in any part of the world, while the business of handling tonnage afloat and the shore end of it has widely improved in every particular and detail during the past few years.

A MARINE City shipyard has this week, contracted for a wooden steamer 142 feet in length, to have a forward watertight compartment which is an innovation in wooden shipbuilding, and to be equipped with all modern improvements, includingt he "Providence" windlass and capstans, the Beck steam steerer, Tyzack's patent stockless anchors, deck engines, etc. The specifications are liberal, and show that everything will be given the vessel that will facilitate the handling of ship and cargo, while the comfort of the crew is a feature that has also been attended to.

A WEAK spot in commercial statistics as furnished for lake traffic is seen in the number of times the same vessel or cargo can be duplicated. As for instance, leaving Buffalo, entering Erie, calling at Cleveland, taking on a trifle of cargo at Detroit, passing the St. Mary's Falls canal, touching at several Lake Superior ports, etc., etc. Of course each way station must be given the credit of arrivals and departures, if not entrances and clearances.

AS AN indication of how shipping is facilitated on the other side of the Atlantic we note that the Mersey Docks and Harbor Board have deposited two bills for next parliamentary session, by which they ask for sanction to raise £4,962,000 ($24,810,000). Of this sum £3,562,000 ($17,810,000) will be expended upon the construction of six new branch docks, two new graving docks, the enlargement or improvement of six of their existing docks, and upon the construction of new cuts between docks, a new entrance from the river Mersey, the erection of a river wall, and in enlarging and extending their existing warehouses, sheds and other accommodations. This is a municipal or state expenditure, and does not come directly out of the funds of the general government. If a port is worth spending money on for improvements it is but just that those directly interested and benefitted should meet a portion of the outlay. Such it appears is the method in use in British ports.

THE government maintains officers known as shipping commissioners at eighteen of the principal coast ports. Their duty is to see after the shipping and discharging of seamen. At minor ports this duty is performed by collectors of customs. In the coasting trade, including the lakes and trade with near by foreign ports the commissioner of navigation says that seamen are shipped directly by the master without the co-operation of a shipping commissioner. The shipping commissioners' offices are employment agencies where the government, free of charge, finds berths for seamen desiring work, and finds seamen for masters and owners desiring crews. Is it possible that there is not one port on the lakes of sufficient importance to warrant the government in establishing such an office, if only on trial? Of course the cost would amount to a couple of thousand dollars for the season but that is a small sum compared to the cost of eighteen on the coast.

UNDER the well advised supervision of the Hon. E. T. Chamberlain, Commissioner of Navigation, the reduction in annual expenditures of the bureau amounts to $12,440, and increase of revenue to $85,000, increases of expenditures $10,300, showing a net annual gain to the government of $87,140. Reductions of burdens annually imposed on American shipowners to $80,700, a total gain to the government and American shipowners annually of $167,840. This excellent showing is made when the entire annual appropriation for the bureau is less than $27,000. It will take well advised measures, as well as close legitimate scheming for any other officer to sail as near to the wind as the present Commissioner of Navigation has done during the past four years.

THE singularly mild weather prevailing over the lake region and which has continued up to the middle of January is turning the thoughts of lake men to the approaching season of navigation. The query among a great many, especially on the lower lakes, is that we are to have no winter weather at all. Certainly old Soliel has been traveling northward again for nearly a month and the days are getting perceptibly longer. It is possible to have hard winter in these latitudes when the sun is at her highest southern declination, but it is hardly probable that much of it will eventuate when she is circling around the vicinity of the equator.

THE commerce of Lake Superior increased over two million tons in 1897 as compared with 1896. The total number of vessels passing Sault Ste. Marie was 17,171 as compared with 18,615 in 1896 and 17,956 in 1895. An analysis of the above figures show that there has been a great falling off in the number of vessels entering Lake Superior and at the same time a great increase in the amount of cargo carried. There is but one conclusion to be drawn—that vessels generally are being built much larger and with far greater carrying capacity. The great increase in Lake Superior traffic has been chiefly in iron ore.

TAKING into consideration the large number of vessel owners and the multiplicity of interests, both domestic or national' and foreign, now embarked in the commerce of the lakes, it is questionable whether any arbitrarily fixed rates of freight would stand the test of even a portion of one season. This situation is greatly to be regretted from a vessel owner's standpoint, but the hard facts and conditions exist and are present with us.

GRAIN MOVEMENT.

The receipts of wheat at the head of the lakes for the week ending last Saturday were 399,104 bushels, while the shipments amounted to 97,904 bushels. Stocks of wheat in store last Saturday amounted to 2,256,874 bushels. The increase for the week amounted to 160,890.

LUMBER OPERATIONS.

The mild weather in the West and N. West has caused nearly all the snow in the woods to disappear and lumbermen are beginning to experience some inconvenience in consequence. In many cases no attempt is made at present to haul logs to the streams, but when cold weather and snow arrives, if it ever does this winter, hauling will be rushed.

Lumbermen prefer that there should not be too much snow, but they find cold weather indispensable. If the weather is cold, ice roads can be mantained. Wagons have lately been pressed into service, to haul supplies to the camps from the railway stations.

CHICAGO RIVER AND NICARAGUA CANAL.

The annual convention of the Brotherhood of Steam Shoveler Dredge Engineers and Cranesmen of America, held at Chicago, closed this week after a three days' session. Delegates were present from nearly every state in the Union and from Canada. The reports of the officers showed the organization to be in a flourishing condition, the membership numbering nearly 500.

Resolutions were passed favoring the government undertaking a twenty-one foot channel for the Chicago river, also the construction of the Nicaragua canal by American capital. These resolutions were placed in the hands of a committee for presentation to Congress. The present officers were re-elected for the ensuing year, as follows:

Charles Rees, president, Chicago; J. H. Miller, first vice president, Chicago; Frank Sweet, second vice president, Trenton, Ont.; Michael McGinnis, third vice president, Celina, Ohio; William O. Kennedy, fourth vice president, St. Charles, Mo.; J. P. O'Connell, treasurer, Moline, Ill.; D. P. Maher, financial secretary, Genesee, Ill.; T. J. Dolan, Jr., secretary, Chicago. Board of directors: Gilbert Lamars, Chicago; Theodore Barlow, Chicago; D. F. Barnes, Whiting, Ind.; Aaron Farrell, St. Johnsville, N. Y., and C. N. Ballinger, Chicago.

FOR RIVER STEAMERS.

The following is a copy of a bill introduced in the Senate and House of Representatives to make the mates of steamboats licensed officers, the same as formerly, and it will meet with the cordial active co-operation of Supervising Inspector General of Steam Vessels, James A. Dumont:

Sec. 440—Whenever any person applies for authority to be employed as chief mate of ocean or coastwise steam vessels, or whenever any person applies for authority to be employed as mate of river steamers, the inspectors shall require satisfactory evidence of the knowledge, experience and skill of the applicant in loading cargo, and in handling the stowage of freight, and if for license as chief mate on ocean or coastwise steamers, shall also examine him as to his knowledge and ability in navigation and managing such vessels and all other duties pretaining to his station, and if satisfied of his qualification and good character they shall grant him a license authorizing him to perform such duties for the term of five years upon the waters upon which he is found qualified to act; but such license shall be suspended or revoked upon satisfactory proof of bad conduct, intemperate habits, unskillfulness, or want of knowledge of the duties of his station or the wilful violation of any provision of this title.

ROSEDALE A CONSTRUCTIVE TOTAL LOSS.

The Canadian steamer Rosedale, which went on East Charity shoal, western end of the St. Lawrence River late last fall, is a constructive total loss, and is now the property of the underwriters. The Rosedale was bound from Ft. Williams to Prescott with a cargo of grain when she stranded. A wrecking expedition was sent to her and after working for a few days the vessel was abandoned to the underwriters. She was finally released at a cost of $17,000 and towed to Kingston, where she is now in drydock. A survey was held on the wrecked steamer last week by Robert Logan, of Cleveland, representing the underwriters and E. Trist of Owen Sound, Ont., for the owners. Her whole bottom is gone from a point under her boilers forward and her tank top floors and frames are badly damaged. Smith, Davis & Co. of Buffalo will offer her for sale in her present condition at the Kingston dry dock. The Rosedale was owned by Haggerty & Crangle of Toronto, and was insured for $75,000. She was built at Sunderland, England, in 1883, and is 1,500 tons gross register. The loss of the Rosedale was one of the heaviest of the season.

SHIPBUILDING, HANDLING CARGOES, EQUIPMENT, INSURANCE.

By the projection of the twenty-foot channel, a mighty impetus was given to shipbuilding on the Great Lakes. By no subsidies save the expenditure of money in the permanent betterment of channels, an American merchant marine has grown up on the Great Lakes, which now excels the merchant marine of any foreign nation except England and Germany. According to the reports of the Commissioner of Navigation of 1897, a greater tonnage was built at lake shipyards during the last fiscal year than in all the rest of the country put together. From 1887 to 1897 lake tonnage grew from 733,069 to 1,410,030. Machinery for the rapid handling of cargoes, such as is seen in no other part of the world, has been invented and placed in extensive use in lake transportation. The capacity of the ships in the active carrying trade has been greatly increased thereby. Cargoes of 100,000 bushels of grain are loaded within five hours, and unloaded in six hours. Five thousand tons of ore are placed on shipboard within three hours, and the cargo is taken out in the light of a working day. Coal drops from car dumping machines into the holds of vessels, and within three hours of the time they tie up to the dock they have on board from 3,000 to 5,000 tons and are ready to sail again. All marine men claim that nowhere in the world has the science of handling cargo economically and rapidly reached so high a state as in the lake service.

Owing to the liberal appropriations given to the lighthouse service, the dangers of navigation have been greatly lessened. With the general introduction of steel in the construction of ships, their seaworthiness has been largely increased, and the loss from depreciation has been reduced to a minimum. The ships built at lake yards during the present decade will compare favorably with vessels of the same class built anywhere in the world. They are constructed to meet the rigid rules of classification enforced by ocean underwriters, and under the inspection of the same inspectors that look after ocean marine. On these accounts marine insurance on the lakes has dropped to a low figure on hull, freight and cargoes.

In their machinery and equipment the most advanced ideas of shipbuilders the world over are followed. Doubtless in no other transportation anywhere are greater results obtained from the burning of a ton of coal than on the lakes.

LARGE CARGOES.

The increased capacity of lake ships is strikingly illustrated in the difference between the largest cargoes of 1896 and those of the last season. The largest cargo carried on the lakes in 1896 was a load of ore shipped at Gladstone on board the Mutual line steamer Coralia and delivered at Ashtabula. The weight of this cargo was 5,088 gross tons, or 5,699 net tons. From Lake Superior, where the draft was limited on account of Sault river channels, the largest cargo in 1896 was 4,637 gross, or 5,194 net, moved from Ashtabula to Conneaut by the steamer Sir Henry Bessemer. During the season of 1897 vessels trading to Lake Superior were loaded about as deep as those trading to Lake Michigan, and there were as many as fifty or sixty cargoes exceeding 6,000 net tons. The best record however is held by the steel barge Amazon, owned by James Corrigan, of Cleveland, in which a cargo of 6,307 net tons (5,631 gross) was carried from Duluth to South Chicago, on a draft of seventeen feet one inch.

THE pilot chart of the North Atlantic for January issued by the Hydrographic Office, Navy Department, is fully up to the standard of former delineations. Commander J. E. Craig, U. S. N., evidently desires to advance the publications of the office during his important detail as hydrographer, nor is he a whit behind his predecessors in the compilation of data contained in the pilot charts.

THE supreme court of Florida held in the recent case of Johnson vs. De Bary-Baya Merchant's line, that the place at which a vessel is taxable is primarily and presumptively the port at which she is registered, and that the vessels of a non-resident corporation duly registered at the home port of the company are not taxable in another state.

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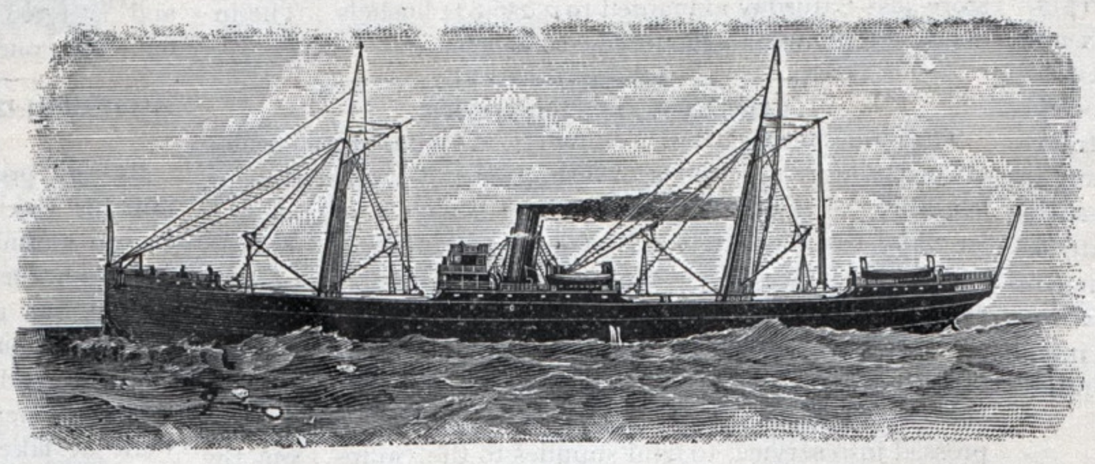

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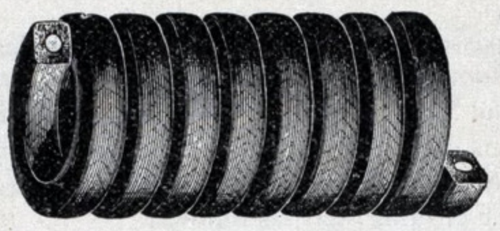

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Capt., Corps of Engineers, U. S. A., Engineer Sec'y,
Approved,
LYMAN J. GAGE, Secretary.

Capt. John Griffin purchased in Toledo this week a half interest in the schooner St. Peter owned by the estate of Mary P. Halloran.

TRADE NOTES.

DAVID KAHNWEILER, 437 Pearl street, New York, manufacturer of cork life preservers, life rafts, boats, etc., has forwarded us one of his calendars for the year. The illustration shows the sinking of the S. S. San Francisco and the Kahnweiler buoys, lifeboats, and rafts used in the rescue of the crew. This old established life-saving equipment house always issue an appropriate calendar and this one for the present year does credit to the excellent taste evidenced by Mr. Kahnweiler.

THE WHITE LINE TOWING CO., Duluth, Minn., W. H. Singer, manager, issue for the current year an elaborate calendar with the device accompanying a suitable illustration "Will you give the White Line a Tow?" A White Line tow boat is seen heading end on to a small yacht whose only occupant is a white lady dressed in white, the folds of her white parasol forming an excellent representation of three head sails and her own dress showing the muslin set aft, in her right hand the numbers are flying signifying that she wants a tow and the White Line boat looks as if she would speedily get her. The calendar also contains particulars of docks and a line drawing of Duluth-Superior harbors.

THE BOSTON AND LOCKPORT BLOCK CO., with factories and offices at Boston, Mass., and Lockport, N. Y., together with a store at No. 33 South street, New York City, and warerooms with Woodward, Wight & Co., New Orleans, have just published the most complete catalogue of blocks and trucks that has ever been offered to the trade. It will be mailed free on application. The whole book is worthy of careful study, and page 105, giving the comparative strength of hooks, shackles, etc., furnishes information never before printed in any work of this kind. This business, having been established since 1840, is now the leading one of its kind in the world; and the Star brand, which is their patented trade mark, insures standard weight and size and the best quality of materials and workmanship. Users of blocks are dependent very largely on the honor and experience of block makers to give them the right kind of goods, since one quality of iron, after it has been japanned, looks as well as another, and only severe tests will determine the real strength and value; and a break at a critical time is liable to cause great damage. This company is constantly adding new lines of goods, and have recently put upon the market a

truck known as the Star truck, which they are offering as low as $10 a dozen in dozen lots. They are also sole owners of Ford's patent self-lubricating device, which when introduced into a common bushed block adds three times to its life and utility, with a difference of only 10 per cent. in the cost of the block, also greatly reducing the friction on the rope.

A GHOST THAT NEVER WALKED.

A very smooth reading ghost story which has just gone the rounds of the press must go the way of others and be killed in spite of sentiment.

The story, briefly, is as follows: The sole survivor of a shipwreck, a very prepossessing young woman, was rescued by the life-saving crew stationed 20 miles below San Lucia, Fla. Two surfmen fell deeply in love with the charming waif and in due time she married one, to the complete undoing of the other. The rejected lover could not master the strange fascination which the wife of his messmate, now Mrs. Johnson, had thrown around him, later she was found drowned near the station. Surfman Smith was occasionally haunted, various members of the life-saving crew sighted the ghost of the late Mrs. Johnson in true ghostly garb and appearance, and eventually Smith, who it was thought had drowned the woman in a fit of jealousy, was lured out in the surf and perished, and the station was thereafter closed.

It was not to be considered for a moment that the brave life-savers would in any way take exception to the frequent calls of so charming a ghost, rather do we think the crew at so lonely a station as Jupiter Inlet would have been too pleased to have seen a dozen or more meandering around evenings at regular intervals to help wile away their long monotonous night vigils. The reason assigned for the discontinuance of the station appeared so lubberly a one that the RECORD on writing to the general superintendent of the service is informed that the shipwreck described never occurred, further, that the crew list of the station never contained the name of Smith or Johnson and that the entire story is pure fiction.

The station has not been finally or rather officially discontinued, but no crew has been employed there since the winter of 1895–6 for good and sufficient reasons, technical, solid, sensible and material, so there is nothing sentimental, spiritualistic or ghostly about the station or the sand spit at Jupiter Inlet.

VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo	1,568,000	2,970,000	322,000	60,000	1,313,000
Chicago	10,801,000	15,169,000	1,215,000	572,000	814,000
Detroit	159,000	85,000	8,000	21,000	7,000
Duluth and Superior	2,157,000	1,772,000	1,416,000	1,037,000	528,000
Milwaukee	132,000	112,000	90,000	24,000	52,000
Montreal	106,000	64,000	515,000	50,000	27,000
Oswego	6,000	50,000			47,000
Toledo	287 000	622,000	416,000	43,000	
Toronto	53,000		13,000		36,000
On Canal			46,000		
On Lakes					
On Mississippi					
Grand Total	38,863,000	39,513,000	14,772,000	4,100,000	4,070,000
Corresponding Date, 1896	53,872,000	20,526,000	13,686,000	3,159,000	4,076,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific slope.

SKIPPER'S WIFE A-WHEEL.

"Do I think the bicycle a proper thing for a woman to ride?" repeated one schooner captain of another down at Charley Ellis' the other day, says the Florida Times Union.

"B'gosh, I've got to think so, for the old lady rides one.

"When I went home last voyage she says to me:

"'John, come an' see my wheel and watch me ride.'

"She's a trim-lookin' little craft, my old lady is, but she didn't know how to ride, so she must have me to cast off the lines and give her a tow until she got pretty well under headway.

"Away she started, a reef in her sheet on one side a-showin' too much of her spars, but a-gettin' along pretty good. She struck a squall and I shouted to her:

"Hi, there, put your wheel hard-a-port and shift your ballast to starboard.' That's what she did, and by the eternal hurricanes the rudder turned clean over the bowsprit and I shouted:

"Woman overboard."

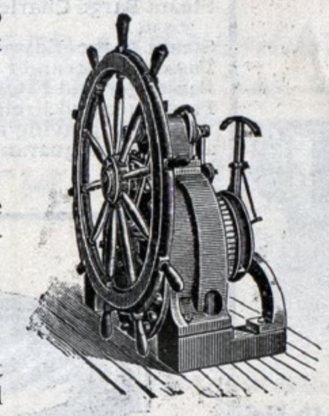
"John, says she reproachfully, 'you don't know anything about it. Of course it's all right on a ship to shift your ballast over to the opposite way you are careening, but on a wheel it's different. When your wheel is leaning to port you lean that way too.'

"And I'll be durned if she didn't learn the thing on that unnatural principle, and now she rides the wheel like my old boat rides the billows."

A SUBJECT of great importance to shipping men generally is an effort that is now being made for the holding of an international congress to form an agreement among the various passenger lines of steamships not to cross the banks of Newfoundland during the fishing season, between April and October. This is due to the large number of accidents that have occurred. The French line plying between New York and Havre is already a party to such an agreement. This lengthens their voyage about three hours.

The Bureau of Navigation, Treasury Department, Washington, has issued an official number for the barge Australia 3,745 gross and 3,468 net tons built at Chicago by the Chicago Ship Building Co. to the order of Capt. James Corrigan, Cleveland.

Queen City Hydraulic Steerer.



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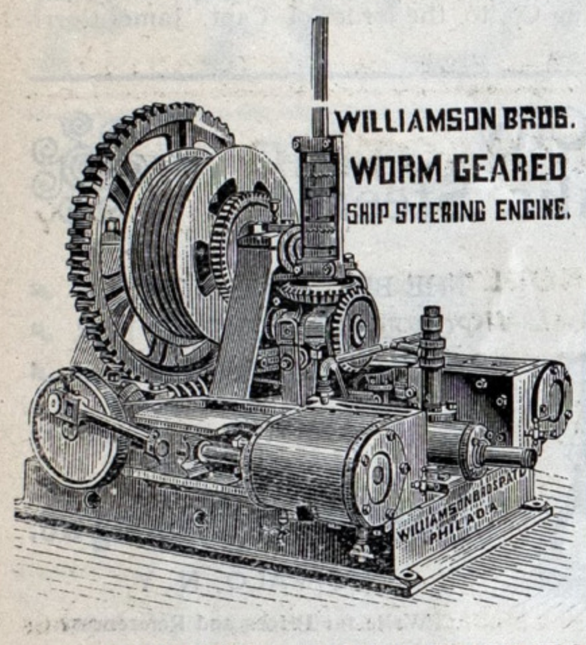

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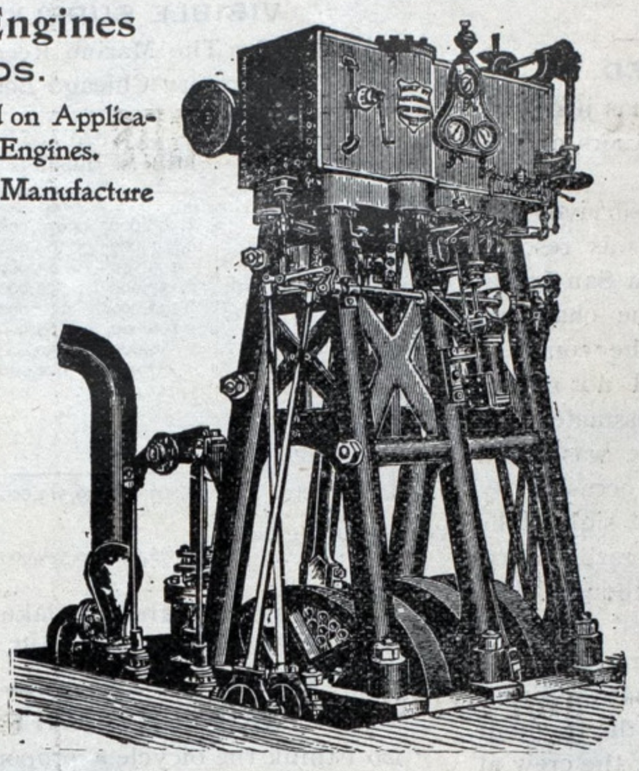

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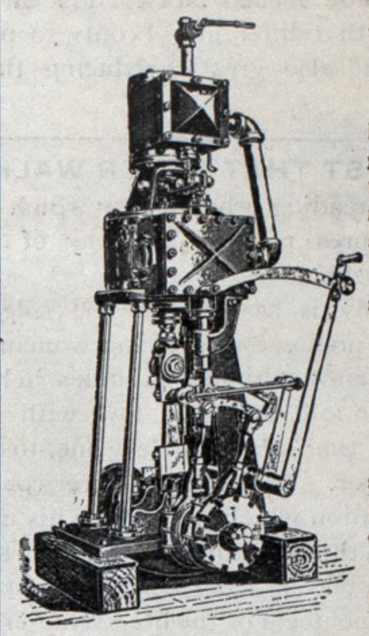

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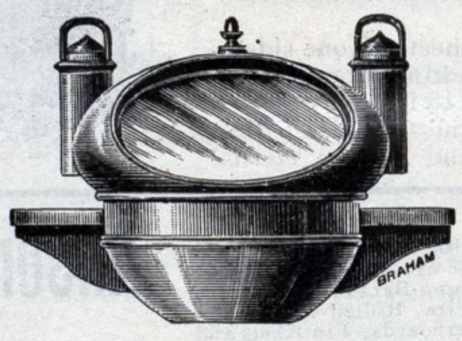

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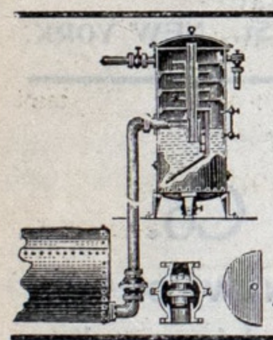

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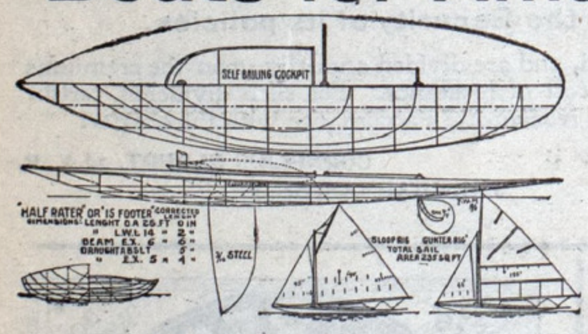

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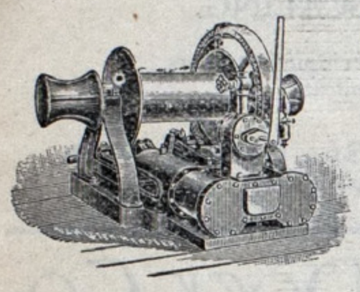

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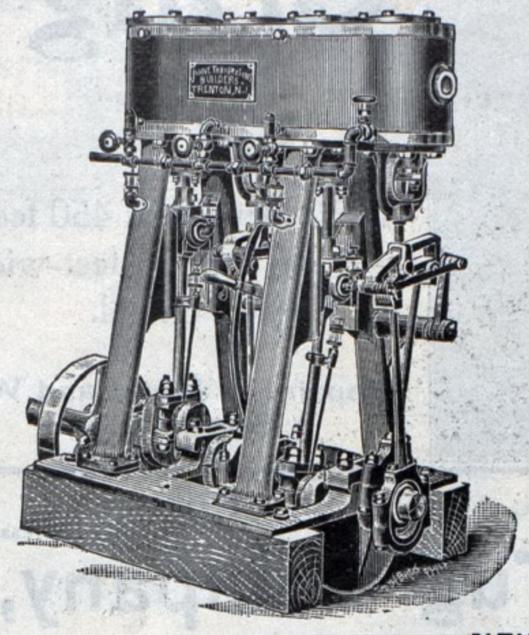

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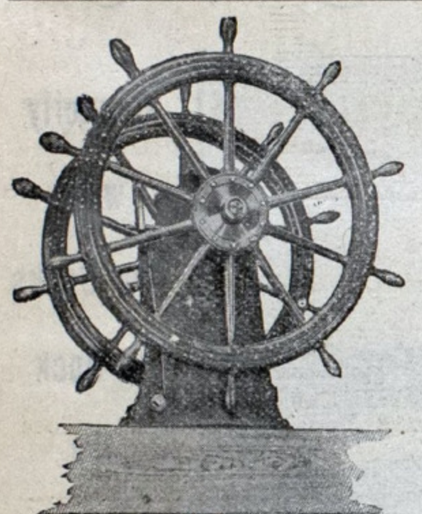

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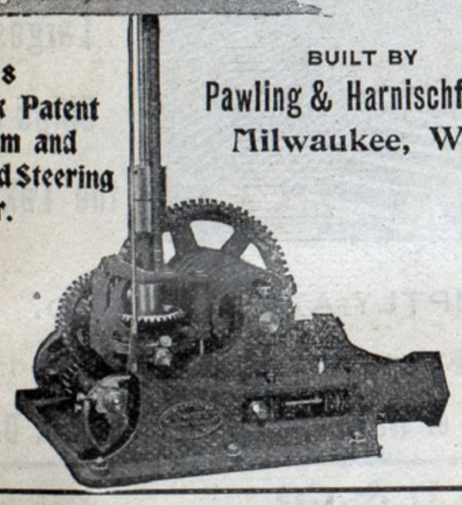

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Have a Wrecking Outfit. We have purchased the Grummond Wrecking Appliances and are prepared to offer our patrons good service.

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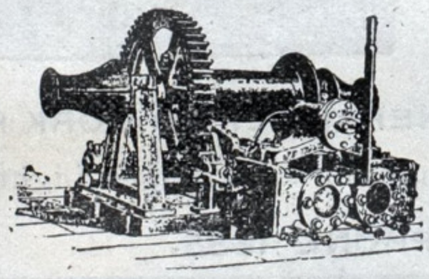

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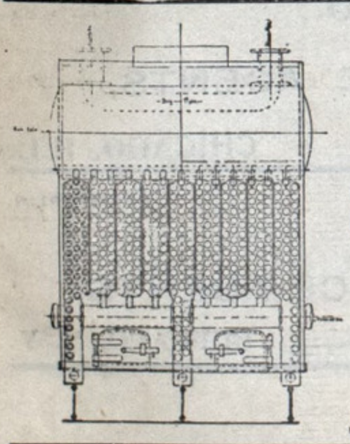

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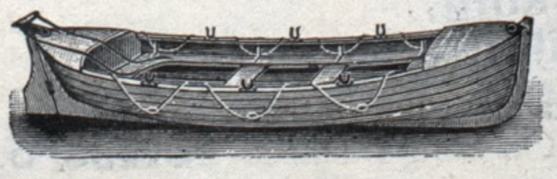

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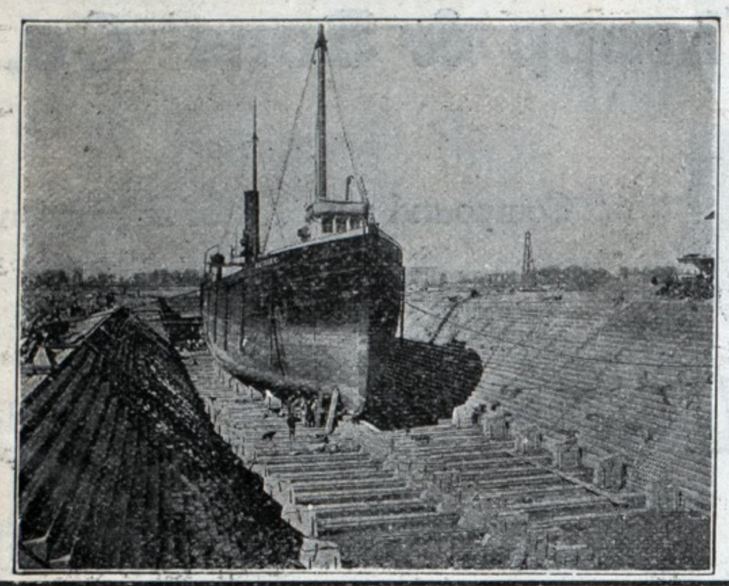

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Repairs to Metal and Wooden Ships a Specialty.

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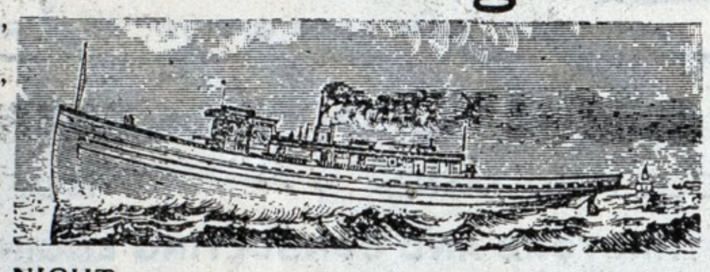

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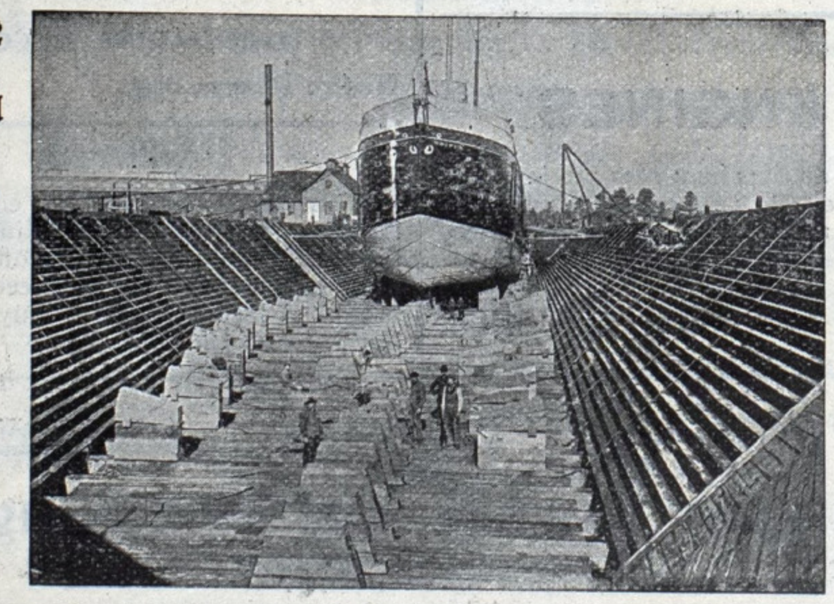

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Length, Extreme	537 feet.	Entrance, Top	55 feet 9 in.
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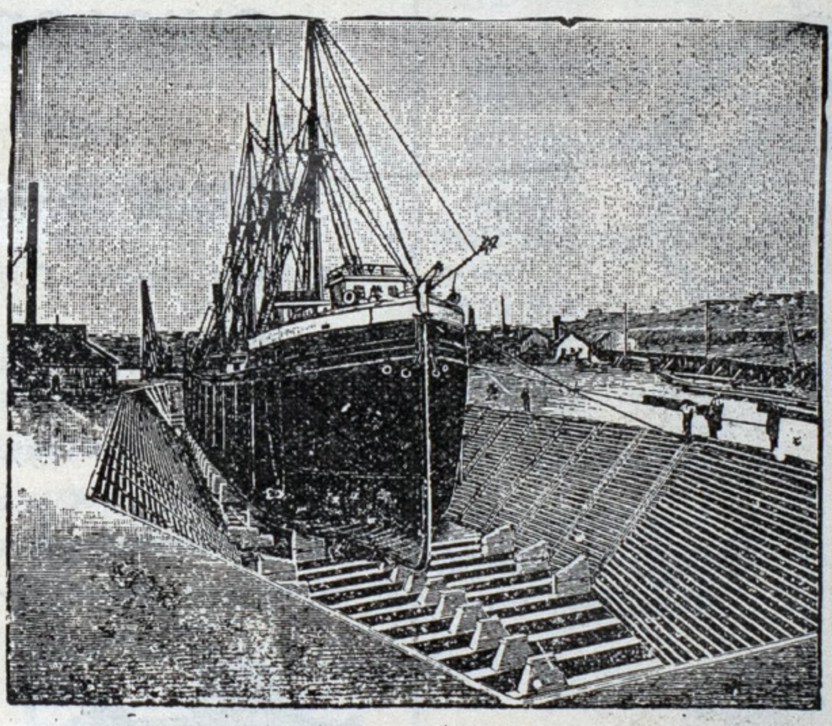

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